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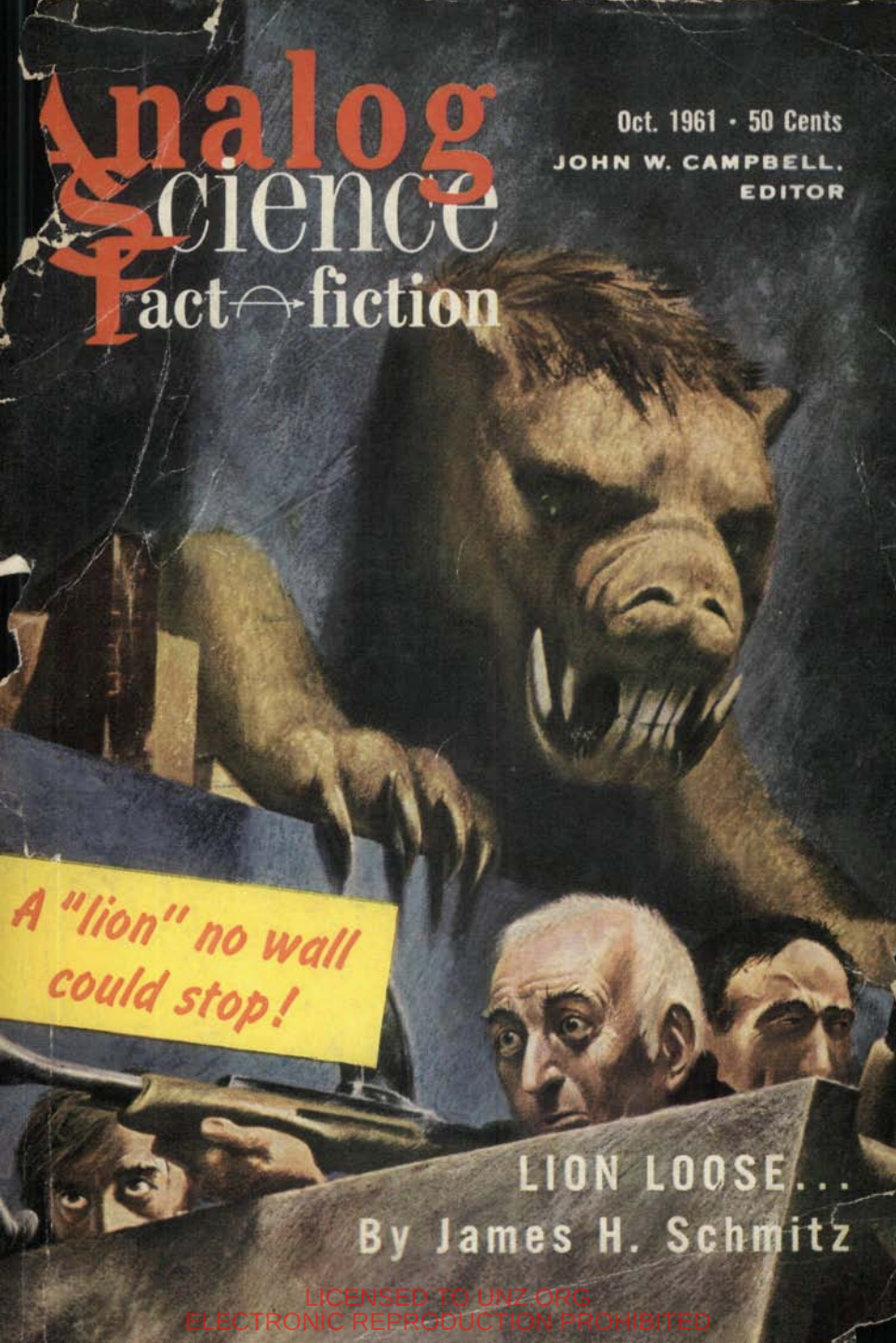

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By James H. Schmitz

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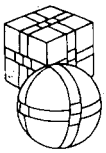

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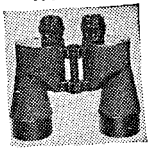

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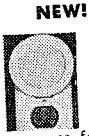

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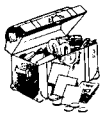

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EDITORIAL

SCIENTIFIC LYNCH LAW

IN THE June, 1960 issue of Analog we carried an article on "The Space-Drive Problem," discussing the problem of the break-through inventor *vs.* Big Science, or the Scientific Orthodoxy, with the Dean Drive as a specific example.

In the May 1, 1961 issue of *Missiles and Rockets* magazine—the engineering trade journal in that field—there appeared an article on "The Controversial Dean Drive," stating that Dean had demonstrated a "proof-of-principle device," but that no practical machine had been built. That Western Gear Company had had their physicists make a paper analysis of the system, and found it did not work . . . . but that a computer simulation run of the system said it *did* work.

In the June 12, 1961 issue of *Missiles and Rockets*, there is what might be called the Air Force's reply—they have released the report of a testing outfit that made tests on a Dean unit, and reported that it did not work.

In the year since I first published that article, I've heard from many people—including some of the nation's top scientists—that it was foolish of me to hold that the Dean drive worked, and perfectly silly to suggest that the government science agencies should even consider testing any such scientific nonsense as a device that challenges the Conservation of Momentum.

There has, also, been a practically unanimous concentration on the question of whether the Dean drive does or does not work—concentration on the specific device and its function or nonfunction . . . . *while completely ignoring the major challenge of the article.*

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I stated, and stated repeatedly in that article, that *our government scientists had failed in their duty under the Scientific Method because they did not allow an inventor to display a working device.*

The Patent Department quite some years back made a ruling that no perpetual motion patents would be considered *without a working model.* The Patent Department acknowledges the right of a man who can in fact demonstrate his idea to patent a perpetual motion device.

The entire defense of the orthodox scientists has rested on this: Since Dean's device obviously can't work, there is no need to investigate it.

The age-old proposition of the proponents of Lynch Law is precisely the same: "Why should we waste time, money, effort, and the thought of decent, busy men trying this criminal? We know perfectly well he's guilty; the sensible thing to do is string him up right now and make him an example to other hoodlums!"

The essence of both propositions is the same: "We know the answer; we don't need to investigate."

Now a great many times, after the long and difficult proceedings of a trial, it is found that, in fact, the accused was entirely guilty. Just think of the time and money wasted trying him; we should go back to the more efficient system of Lynch Law, and hang them in the first place, maybe?

It makes absolutely no difference whether the accused is guilty-in-fact or not, he has, we hold, a right to a fair trial.

It took a great many centuries to establish that principle. It's still a tough battle to force people to accept that principle—particularly when strong emotional attitudes are at work.

The essential point of my June, 1960 article was that our modern "sophisticated" government science has gone back to scientific Lynch Law proceedings. The bureaucrats decide that the accused is guilty of being a crackpot without benefit of trial.

The Air Force, subsequent to the publicity blast that the Dean device got through Analog, the *Saturday Evening Post,* and the Dave Garroway Show, finally gave the device a trial.

Please stop at this point.

Stop completely.

Read the following statement word by word, and get precisely—not approximately—what I'm saying.

The fact that the Air Force finally *did* give the Dean device a trial proves in full the validity of my June, 1960 article. In doing so they acknowledge that they had been practicing scientific Lynch Law . . . and belatedly tried to make up for it by arranging a trial.

As complete, one hundred per cent proof that they acknowledged their failure to comply with the basic tenets of the Scientific Method, what more could be wanted?

Please note carefully: It makes no difference to the principle of Fair

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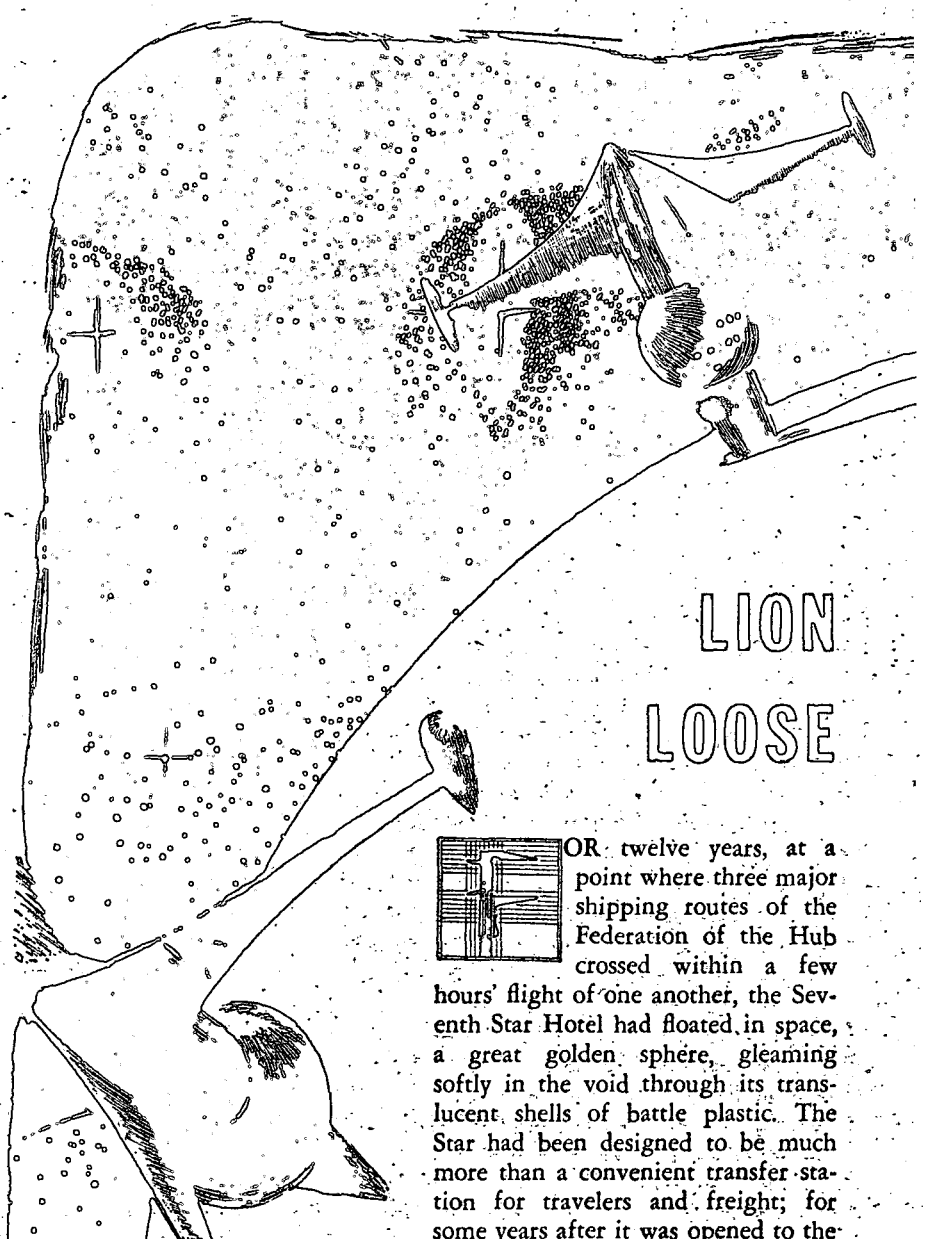

LION LOOSE

FOR twelve years, at a point where three major shipping routes of the Federation of the Hub crossed within a few hours' flight of one another, the Seventh Star Hotel had floated in space, a great golden sphere, gleaming softly in the void through its translucent shells of battle plastic. The Star had been designed to be much more than a convenient transfer station for travelers and freight; for some years after it was opened to the

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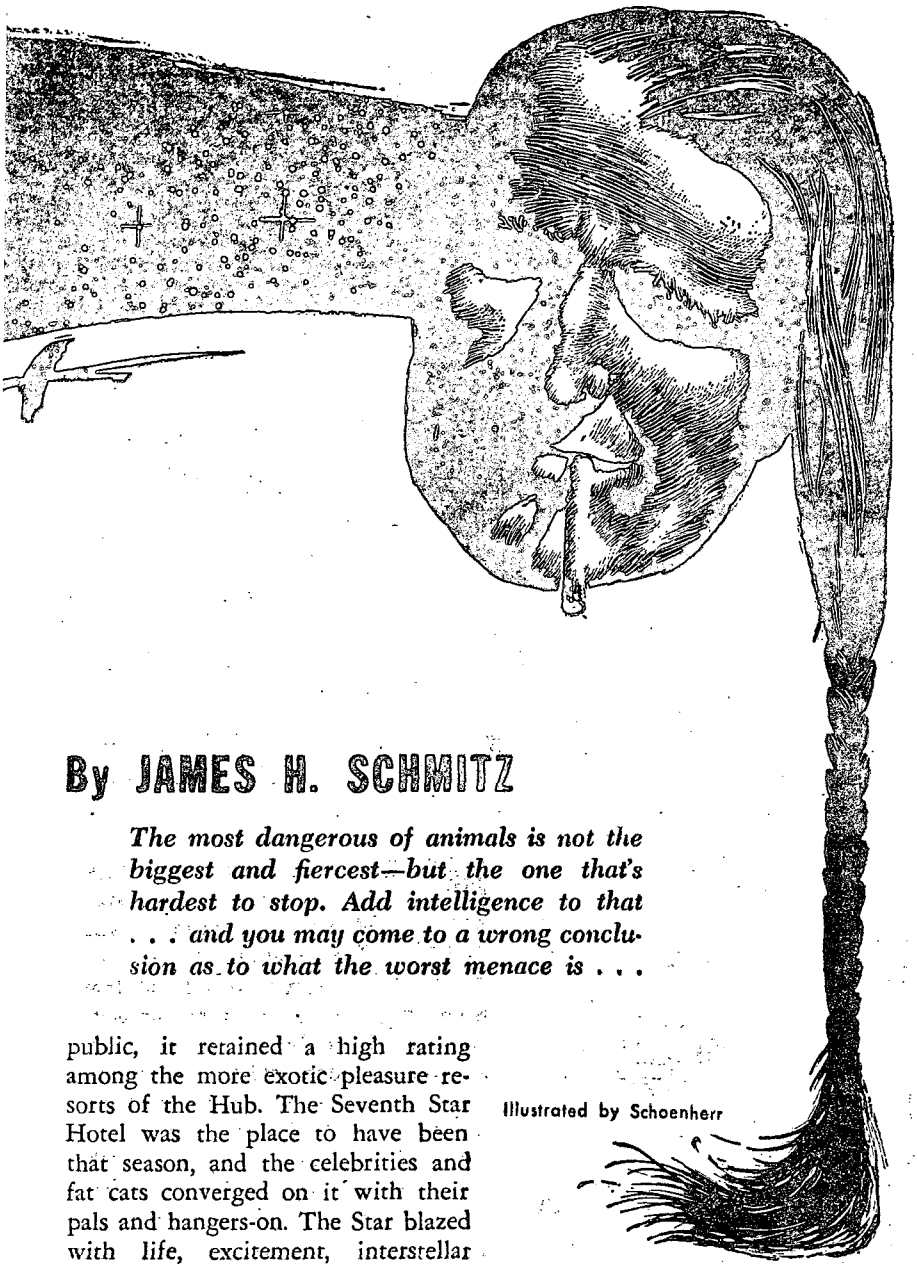

By JAMES H. SCHMITZ

The most dangerous of animals is not the biggest and fiercest—but the one that's hardest to stop. Add intelligence to that . . . and you may come to a wrong conclusion as to what the worst menace is . . .

Illustrated by Schoenherr

public, it retained a high rating among the more exotic pleasure resorts of the Hub. The Seventh Star Hotel was the place to have been that season, and the celebrities and fat cats converged on it with their pals and hangers-on. The Star blazed with life, excitement, interstellar

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scandals, tinkled with streams of credits dancing in from a thousand worlds. In short, it had started out as a paying proposition.

But gradually things changed. The Star's entertainment remained as delightfully outrageous as ever, the cuisine as excellent; the accommodations and service were still above reproach. The fleecing, in general, became no less expertly painless. But one had *been* there. By its eighth year, the Star was dated. Now, in its twelfth, it lived soberly off the liner and freighter trade, four fifths of the guest suites shut down, the remainder irregularly occupied between ship departures.

And in another seven hours, if the plans of certain men went through, the Seventh Star Hotel would abruptly wink out of existence.

Some fifty or sixty early diners were scattered about the tables on the garden terraces of Phalagon House, the Seventh Star Hotel's most exclusive eatery. One of them had just finished his meal, sat smoking and regarding a spiraling flow of exquisitely indicated female figures across the garden's skyscape with an air of friendly approval. He was a large and muscular young man, deeply tanned, with shoulders of impressive thickness, an aquiline nose, and dark, reflective eyes.

After a minute or two, he yawned comfortably, put out the cigarette, and pushed his chair back from the table. As he came to his feet, there was a soft bell-note from the table ComWeb. He hesitated, said, "Go ahead."

"Is intrusion permitted?" the ComWeb inquired.

"Depends," the guest said. "Who's calling?"

"The name is Reetal Destone."

He grinned, appeared pleasantly surprised. "Put the lady through."

There was a brief silence. Then a woman's voice inquired softly, "Quillan?"

"Right here, doll! Where—"

"Seal the ComWeb, Quillan."

He reached down to the instrument, tapped the seal button, said, "All right. We're private."

"Probably," the woman's voice said. "But better scramble this, too. I want to be very sure no one's listening."

Quillan grunted, slid his left hand into an inner coat pocket, briefly fingered a device of the approximate size and shape of a cigarette, drew his hand out again. "Scrambling!" he announced. "Now, what—"

"Mayday, Quillan," the soft voice said. "Can you come immediately?"

Quillan's face went expressionless. "Of course. Is it urgent?"

"I'm in no present danger. But we'd better waste no time."

"Is it going to take real hardware? I'm carrying a finger gun at the moment."

"Then go to your rooms and pick up something useful," Reetal said. "This should take real hardware, all right."

"All right. Then where do I go?"

"I'll meet you at your door. I know where it is."

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When Quillan arrived, she was standing before the door to his suite, a tall blonde in a sleeveless black and gold sheath; a beautiful body, a warm, lovely, humorous face. The warmth and humor were real, but masked a mind as impersonally efficient as a computer, and a taste for high and dangerous living. When Quillan had last met Reetal Destone, a year and a half before, the taste was being satisfied in industrial espionage. He hadn't heard of her activities since then.

She smiled thoughtfully at him as he came up. "I'll wait outside," she said. "We're not talking here."

Quillan nodded, went on into his living room, selected a gun belt and holstered gun from a suitcase, fastened the belt around his waist under the coat, and came out. "Now what?"

"First a little portal-hopping—"

He followed her across the corridor and into a tube portal, watched as she tapped out a setting. The exit light flashed a moment later; they stepped out into a vacant lounge elsewhere in the same building, crossed it, entered another portal. After three more shifts, they emerged into a long hall, dimly lit, heavily carpeted. There was no one in sight.

"Last stop," Reetal said. She glanced up at his face. "We're on the other side of the Star now, in one of the sections they've closed up. I've established a kind of emergency headquarters here. The Star's nearly broke, did you know?"

"I'd heard of it."

"That appears to be part of the reason for what's going on."

Quillan said, "What's going on?"

Reetal slid her arm through his, said, "Come on. That's my, hm-m-m, unregistered suite over there. Big boy, it's very, very selfish of me, but I was extremely glad to detect your name on the list of newly arrived guests just now! As to what's going on . . . the *Camelot* berths here at midnight, you know."

Quillan nodded. "I've some business with one of her passengers."

Reetal bent to unlock the entrance door to the indicated suite. "The way it looks now," she remarked, "the odds are pretty high that you're not going to keep that appointment."

"Why not?

"Because shortly after the *Camelot* docks and something's been unloaded from her, the *Camelot* and the Seventh Star Hotel are scheduled to go *poof!* together. Along with you, me, and some twelve thousand other people. And, so far, I haven't been able to think of a good way to keep it from happening."

Quillan was silent a moment. "Who's scheduling the poof?" he asked.

"Some old acquaintances of ours are among them. Come on in. What they're doing comes under the heading of destroying the evidence."

She locked the door behind them, said, "Just a moment," went over to the paneled wall, turned down a tiny silver switch. "Room portal," she said, nodding at the wall. "It might come in handy. I keep it turned off most of the time."

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"Why are you turning it on now?" Quillan asked.

"One of the Star's stewards is working on this with me. He'll be along as soon as he can get away. Now I'll give you the whole thing as briefly as I can. The old acquaintances I mentioned are some boys of the Brotherhood of Beldon. Movaine's here; he's got Marras Cooms and Fluel with him, and around thirty of the Brotherhood's top guns. Nome Lancion's coming in on the *Camelot* in person tonight to take charge. Obviously, with all that brass on the job, they're after something very big. Just what it is, I don't yet know. I've got one clue, but a rather puzzling one. Tell you about that later. Do you know Velladon?"

"The commodore here?" Quillan nodded. "I've never met him but I know who he is."

Reetal said, "He's been manager of the Seventh Star Hotel for the past nine years. He's involved in the Beldon outfit's operation. So is the chief of the Star's private security force—his name's Ryter—and half a dozen other Star executives. They've got plenty of firepower, too; close to half the entire security force, I understand, including all the officers. That would come to nearly seventy men. There's reason to believe the rest of the force was disarmed and murdered by them in the subspace section of the Star about twelve hours ago. They haven't been seen since then.

"Now, Velladon, aside from his share in whatever they're after, has another reason for wanting to wipe out the Star in an unexplained blow-up. There I have definite information. Did you know the Mooley brothers owned the Star?"

"Yes."

"I've been working for the Mooleys the past eight months," Reetal said, "checking up on employees at Velladon's level for indications of graft. And it appears the commodore has been robbing them blind here for at least several years."

"Sort of risky thing to try with the Mooleys, from what I hear," Quillan remarked.

"Yes. Very. Velladon had reason to be getting a little desperate about that. Two men were planted here a month ago. One of them is Sher Heraga, the steward I told you about. The other man came in as a bookkeeper. Two weeks ago, Heraga got word out that the bookkeeper had disappeared. Velladon and Ryter apparently got wise to what he was trying to do. So the Mooleys sent me here to find out exactly what was going on before they took action. I arrived four days ago."

She gave a regretful little headshake. "I waited almost a day before contacting Heraga. It seemed advisable to move very cautiously in the matter. But that made it a little too late to do anything. Quillan, for the past three days, the Seventh Star Hotel has been locked up like a bank vault. And except for ourselves, only the people who are in on the plot are aware of it."

"The message transmitters are inoperative?" he asked.

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Reetal nodded. "The story is that a gravitic storm center in the area has disrupted transmissions completely for the time being."

"What about incoming ships?"

"Yours was the only one scheduled before the *Camelot* arrives. It left again eight hours ago. Nobody here had been let on board. The guests who wanted to apply for outgoing berths were told there were none open, that they'd have to wait for the *Camelot*."

She went over to a desk, unlocked a drawer, took out a sheaf of papers, and handed one of them to Quillan. "That's the layout of the Star," she said. "This five-level building over by the shell is the Executive Block. The Brotherhood and the commodore's men moved in there this morning. The Block is the Star's defense center. It's raid-proofed, contains the control offices and the transmitter and armament rooms. About the standard arrangement. While they hold the Executive Block, they have absolute control of the Star."

"If it's the defense center, it should be practically impossible to do anything about them there," Quillan agreed. "They could close it up, and dump the air out of the rest of the Star in a minute, if they had to. But there must be . . . well, what about the lifeboats in the subspace section—and our pals must have a getaway ship stashed away somewhere?"

"They have two ships," Reetal said. "A souped-up armed freighter the Brotherhood came in on, and a large armed yacht which seems to be the commodore's personal property. Unfortunately, they're both in subspace locks."

"Why unfortunately?"

"Because they've sealed off subspace. Try portaling down there, and you'll find yourself looking at a battle-plastic bulkhead. There's no way of getting either to those ships or to the lifeboats."

Quillan lifted his eyebrows. "And *that* hasn't caused any comment? What about the maintenance crews, the warehouse men, the—"

"All the work crews were hauled out of subspace this morning," Reetal said. "On the quiet, the Star's employees have been told that a gang of raiders was spotted in the warehouse area, and is at present cornered there. Naturally, the matter isn't to be mentioned to the guests, to avoid arousing unnecessary concern. And that explains everything very neatly. The absence of the security men, and why subspace is sealed off. Why the Executive Block is under guard, and can't be entered—and why the technical and office personnel in there don't come out, and don't communicate out. They've been put on emergency status, officially."

"Yunk," Quillan said disgustedly after a moment. "This begins to look like a hopeless situation, doll!"

"True."

"Let's see now—"

Reetal interrupted, "There is one portal still open to subspace. That's in the Executive Block, of course, and Heraga reports it's heavily guarded."

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"How does he know?"

"The Block's getting its meals from Phalagon House. He floated a diner in there a few hours ago."

"Well," Quillan said, brightening, "perhaps a deft flavoring of poison—"

Reetal shook her head. "I checked over the hospital stocks. Not a thing there that wouldn't be spotted at once. Unless we can clobber them thoroughly, we can't afford to make them suspicious with a trick like that."

"Poison would be a bit rough on the office help, too," Quillan conceded. "They wouldn't be in on the deal."

"No, they're not. They're working under guard."

"Gas . . . no, I suppose not. It would take too long to whip up something that could turn the trick." Quillan glanced at his watch. "If the *Camelot* docks at midnight, we've around six and a half hours left, doll! And I don't find myself coming up with any brilliant ideas. What have you thought of?"

Reetal hesitated a moment. "Nothing very brilliant either," she said then. "But there are two things we might try as a last resort."

"Let's hear them."

"I know a number of people registered in the Star at present who'd be carrying personal weapons. If they were told the facts, I could probably line up around twenty who'd be willing to make a try to get into the Executive Block, and take over either the control offices or the transmitter room. If we got a warning out to the *Camelot,* that would break up the plot. Of course, it wouldn't necessarily save the Star."

"No," Quillan said, "but it's worth trying if we can't think of something better. How would you get them inside?"

"We could crowd twenty men into one of those diner trucks, and Heraga could take us in."

"What kind of people are your pals?"

"A few smugglers and confidence men I've had connections with. Fairly good boys for this sort of thing. Then there's an old millionaire sportsman, with a party of six, waiting to transfer to the *Camelot* for a safari on Jontarou. Old Philmarron isn't all there, in my opinion, but he's dead game and loves any kind of a ruckus. We can count on him and his friends, if they're not too drunk at the moment. Still . . . that's not too many to set against something less than a hundred professional guns, even though some of them must be down on the two ships."

"No, not enough." Quillan looked thoughtful. "What's the other idea?"

"Let the cat out of the bag generally. Tell the guests and the employees out here what's going on, and see if somebody can think of something that might be done."

He shook his head. "What you'd set off with that would be anywhere between a riot and a panic. The boys in the Executive Block would simply give us the breathless treatment. Apparently, they prefer to have every-

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thing looking quiet and normal when the *Camelot* gets here—"

"But they don't have to play it that way," Reetal agreed. "We might be dead for hours before the liner docks. If they keep the landing lock closed until what they want has been unloaded, nobody on the *Camelot* would realize what had happened before it was too late."

There was a moment's silence. Then Quillan said, "You mentioned you'd picked up a clue to what they're after. What was that?"

"Well, that's a curious thing," Reetal said. "On the trip out here, a young girl name of Solvey Kinmarten attached herself to me. She didn't want to talk much, but I gathered she was newly married, and that her husband was on board and was neglecting her. She's an appealing little thing, and she seemed so forlorn and upset that I adopted her for the rest of the run. After we arrived, of course, I pretty well forgot about the Kinmartens and their troubles.

"A few hours ago, Solvey suddenly came bursting into the suite where I'm registered. She was shaking all over. After I calmed her down a bit, she spilled out her story. She and her husband, Brock Kinmarten, are rest wardens. With another man named Eltak, whom Solvey describes as 'some sort of crazy old coot,' they're assigned to escort two deluxe private rest cubicles to a very exclusive sanatorium on Mezmiali. But Brock told Solvey at the beginning of the trip that this was a very unusual assignment, that he didn't want her even to come near the cubicles. That wouldn't have bothered her so much, she says, but on the way here Brock became increasingly irritable and absent-minded. She knew he was worrying about the cubicles, and she began to wonder whether they weren't involved in something illegal. The pay was very high; they're both getting almost twice the regular warden fee for the job. One day, she found an opportunity to do a little investigating.

"The cubicles are registered respectively to a Lady Pendrake and a Major Pendrake. Lady Pendrake appears to be genuine; the cubicle is unusually large and constructed somewhat differently from the ones with which Solvey was familiar, but it was clear that it had an occupant. However, the life indicator on 'Major Pendrake's' cubicle registered zero when she switched it on. If there was something inside it, it wasn't a living human being.

"That was all she learned at the time, because she was afraid Brock might catch her in the cubicle room. Here in the Star, the cubicles were taken to a suite reserved for Lady Pendrake. The other man, Eltak, stayed in the suite with the cubicles, while the Kinmartens were given other quarters. However, Brock was still acting oddly and spending most of his time in the Pendrake suite. So this morning, Solvey swiped his key to the suite and slipped in when she knew the two men had left it.

"She'd barely got there when she

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heard Brock and Eltak at the door again. She ran into the next room, and hid in a closet. Suddenly there was a commotion in the front room, and Solvey realized that men from the Star's security force had arrived and were arresting Brock and Eltak. They hauled both of them away, then floated the cubicles out and on a carrier and took them off too, locking the suite behind them.

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"Solvey was in a complete panic, sure that she and Brock had become involved in some serious breach of the Warden Code. She waited a few minutes, then slipped out of the Pendrake suite, and looked me up to see if I couldn't help them. I had Heraga check, and he reported that the Kinmarten suite was under observation. Evidently, they wanted to pick up the girl, too. So I tucked her away in one of the suites in this section, and gave her something to put her to sleep. She's there now."

Quillan said, "And where are the prisoners and the cubicles?"

"In the Executive Block."

"How do you know?"

Reetal smiled briefly. "The Duke of Fluel told me."

"Huh? The Brotherhood knows you're here?"

"Relax," Reetal said. "Nobody but Heraga knows I'm working for the Mooleys. I told the Duke I had a big con deal set up when the *Camelot* came in—I even suggested he might like to get in on it. He laughed, and said he had other plans. But he won't mention to anyone that I'm here."

"Why not?"

"Because," Reetal said dryly, "what the Duke is planning to get in on is an hour of tender dalliance. Before the *Camelot* arrives, necessarily. The cold-blooded little skunk!" She hesitated a moment; when she spoke again, her voice had turned harsh and nasal, wicked amusement sounding through it. "Sort of busy at the moment, sweetheart, but we might find time for a drink or two later on in the evening, eh?"

Quillan grunted. "You're as good at the voice imitations as ever. How did you find out about the cubicles?"

"I took a chance and fed him a Moment of Truth."

"With Fluel," Quillan said thoughtfully, "that *was* taking a chance!"

"Believe me, I was aware of it! I've run into card-carrying sadists before, but the Duke's the only one who scares me silly. But it did work. He dropped in for about a minute and a half, and came out without noticing a thing. Meanwhile, I'd got the answers to a few questions. The bomb with which they're planning to mop up behind them already has been planted up here in the norm-space section. Fluel didn't know where; armaments experts took care of it. It's armed now. There's a firing switch on each of their ships, and both switches have to be tripped before the thing goes off. Part of what they're after is in those Pendrake rest cubicles—"

"Part of it?" Quillan asked.

"Uh-huh. An even hundred similar cubicles will be unloaded from the *Camelot*—the bulk of the haul; which is why Nome Lancion is supervising things on the liner. I started to ask what was in the cubicles, but I saw Fluel was beginning to lose that blank look they have under Truth, and switched back to light chitchat just before he woke up. Yaco's paying for the job—or rather, it *will* pay for the stuff, on delivery, and no questions asked."

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"That's not very much help, is it?" Quillan said after a moment. "Something a big crooked industrial combine like Yaco thinks it can use—"

"It must expect to be able to use it to extremely good advantage," Reetal said. "The Brotherhood will collect thirty million credits for their part of the operation. The commodore's group presumably won't do any worse." She glanced past Quillan toward the room portal. "It's O.K., Heraga! Come in."

Sher Heraga was a lean, dark-skinned little man with a badly bent nose, black curly hair, and a nervous look. He regretted, he said, that he hadn't been able to uncover anything which might be a lead to the location of the bomb. Apparently, it wasn't even being guarded. And, of course, a bomb of the size required here would be quite easy to conceal.

"If they haven't placed guards over it," Reetal agreed, "it'll take blind luck to spot it! Unless we can get hold of one of the men who knows where it's planted—"

There was silence for some seconds. Then Quillan said, "Well, if we can't work out a good plan, we'd better see what we can do with one of the bad ones. Are the commodore's security men wearing uniforms?"

Heraga shook his head. "Not the ones I saw."

"Then here's an idea," Quillan said. "As things stand, barging into the Executive Block with a small armed group can't accomplish much. It might be more interesting than sitting around and waiting to be blown up, but it still would be suicide. However, if we could get things softened up and disorganized in there first—"

"Softened up and disorganized how?" Reetal asked.

"We can use that notion you had of having Heraga float in another diner. This time, I'm on board—in a steward's uniform, in case the guards check."

"They didn't the first time," Heraga said.

"Sloppy of them. Well, they're just gun hands. Anyway, once we're inside I shuck off the uniform and get out. Heraga delivers his goodies, and leaves again—"

Reetal gave him a look. "You'll get shot down the instant you're seen, dope!"

"I think not. There're two groups in there—around a hundred men in all—and they haven't had time to get well acquainted yet. I'll have my gun in sight, and anyone who sees me should figure I belong to the other group, until I run into one of the Brotherhood boys who knows me personally."

"Then that's when you get shot down. I understand the last time you and the Duke of Fluel met, he woke up with lumps."

"The Duke doesn't love me," Quillan admitted. "But there's nothing personal between me and Movaine or Marras Cooms—and I'll have a message for Movaine."

"What kind of a message?"

"I'll have to play that by ear a lit-

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tle. It depends on how things look in there. But I have a few ideas, based on what you've learned of the operation. Now, just what I can do when I get that far, I don't know yet. I'll simply try to louse the deal up as much as I can. That may take time, and, of course, it might turn out to be impossible to get word out to you."

"So what do we do meanwhile?" Reetal asked. "If we start lining up our attack group immediately, and then there's no action for another five or six hours, there's always the chance of a leak, with around twenty people in the know."

"And if there's a leak," Quillan agreed, "we've probably had it. No, you'd better wait with that! If I'm not out, and you haven't heard from me before the *Camelot*'s actually due to dock, Heraga can still take the group—everyone but yourself—in as scheduled."

"Why everyone but me?" Reetal asked.

"If nothing else works, you might find some way of getting a warning to the liner's security force after they've docked. It isn't much of a possibility, but we can't afford to throw it away."

"Yes, I see." Reetal looked reflective. "What do you think, Heraga?"

The little man shrugged. "You told me that Mr. Quillan is not inexperienced in dealing with, ah, his enemies. If he feels he might accomplish something in the Executive Block, I'm in favor of the plan. The situation certainly could hardly become worse."

"That's the spirit!" Quillan approved. "The positive outlook—that's what a thing like this mainly takes. Can you arrange for the diner and the uniform?"

"Oh, yes," Heraga said. "I've had myself put in charge of that detail, naturally."

"Then what can you tell me about the Executive Block's layout?"

Reetal stood up. "Come over to the desk," she said. "We've got diagrams."

"The five levels, as you see," Heraga was explaining a few moments later, "are built directly into the curve of the Star's shells. Level Five, on the top, is therefore quite small. The other levels are fairly extensive. Two, Three, and Four could each accommodate a hundred men comfortably. These levels contain mainly living quarters, private offices, and the like. The Brotherhood men appear to be occupying the fourth level, Velladon's group the second. The third may be reserved for meetings between representatives of the two groups. All three of these levels are connected by single-exit portals to the large entrance area on the ground level.

"The portals stood open when I went in earlier today, and there were about twenty armed men lounging about the entrance hall. I recognized approximately half of them as being members of the Star's security force. The others were unfamiliar." Heraga cleared his throat. "There is a possibility that the two groups do not entirely trust each other."

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Quillan nodded. "If they're playing around with something like sixty million CR, anybody would have to be crazy to trust the Brotherhood of Beldon. The transmitter room and the control offices are guarded, too?"

"Yes, but not heavily," Heraga said. "There seem to be only a few men stationed at each of those points. Ostensibly, they're there as a safeguard—in case the imaginary raiders attempt to break out of the subspace section."

"What's the arrangement of the ordinary walk-in tube portals in the Executive Block?"

"There is one which interconnects the five levels. On each of the lower levels, there are, in addition, several portals which lead out to various points in the Seventh Star Hotel. On the fifth level, there is only one portal of this kind. Except for the portal which operates between the different levels in the Executive Block, all of them have been rendered unusable at present."

"Unusable in what way?"

"They have been sealed off on the Executive Block side."

"Can you get me a diagram of the entry and exit systems those outgoing portals connect with?" Quillan asked. "I might turn one of them usable again."

"Yes, I can do that."

"How about the communication possibilities?"

"The ComWeb system is functioning normally on the second, third, and fourth levels. It has been shut off on the first level—to avoid the spread of 'alarming rumors' by office personnel. There is no ComWeb on the fifth level."

Reetal said, "We'll shift our operating headquarters back to my registered suite then. The ComWebs are turned off in these vacant sections. I'll stay in the other suite in case you find a chance to signal in."

Heraga left a few minutes later to make his arrangements. Reetal smiled at Quillan, a little dubiously.

"Good luck, guy," she said. "Anything else to settle before you start off?"

Quillan nodded. "Couple of details. If you're going to be in your regular suite, and Fluel finds himself with some idle time on hand, he might show up for the dalliance you mentioned."

Reetal's smile changed slightly. Her left hand fluffed the hair at the back of her head, flicked down again. There was a tiny click, and Quillan looked at a small jeweled hair-clasp in her palm, its needle beak pointing at him.

"It hasn't got much range," Reetal said, "but within ten feet it will scramble the Duke's brains just as thoroughly as they need to be scrambled."

"Good enough," Quillan said. "Just don't give that boy the ghost of a chance, doll. He has a rep for playing very unnice games with the ladies."

"I know his reputation." Reetal replaced the tiny gun in her hair. "Anything else?"

"Yes. Let's look in on the Kinmarten chick for a moment. If she's

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awake, she may have remembered something or other by now that she didn't think to tell you."

They found Solvey Kinmarten awake, and tearfully glad to see Reetal. Quillan was introduced as a member of the legal profession who would do what he could for Solvey and her husband. Solvey frowned prettily, trying very hard to remember anything that might be of use. But it appeared that she had told Reetal all she knew.

The blue and white Phalagon House diner, driven by Heraga, was admitted without comment into the Executive Block. It floated on unchallenged through the big entry hall and into a corridor. Immediately behind the first turn of the corridor, the diner paused a few seconds. Its side door opened and closed. The diner moved on.

Quillan, coatless and with the well-worn butt of a big Miam Devil Special protruding from the holster on his right hip, came briskly back along the corridor. Between fifteen and twenty men, their guns also conspicuously in evidence, were scattered about the entrance hall, expressions and attitudes indicating a curious mixture of boredom and uneasy tension. The eyes of about half of them swiveled around to Quillan when he came into the hall; then, with one exception, they looked indifferently away again.

The exception, leaning against the wall near the three open portals to the upper levels, continued to stare as Quillan came toward him, forehead creased in a deep scowl as if he were painfully ransacking his mind for something. Quillan stopped in front of him.

"Chum," he asked, "any idea where Movaine is at the moment? They just give me this message for him—"

Still scowling, the other scratched his chin and blinked. "Uh . . . dunno for sure," he said after a moment. "He oughta be in the third level conference room with the rest of 'em. Uh . . . dunno you oughta barge in there right now, pal! The commodore's *reee-lly* hot about somethin'!"

Quillan looked worried. "Gotta chance it, I guess! Message is pretty important, they say—" He turned, went through the center portal of the three, abruptly found himself walking along a wide, well-lit hall.

Nobody in sight here, or in the first intersecting passage he came to. When he reached the next passage, he heard voices on the right, turned toward them, went by a string of closed doors on both sides until, forty feet on, the passage angled again and opened into a long, high-ceilinged room. The voices came through an open door on the right side of the room. Standing against the wall beside the door were two men whose heads turned sharply toward Quillan as he appeared in the passage. The short, chunky one scowled. The big man next to him, the top of whose head had been permanently seared clear of hair years before by a near miss from a blaster, dropped his jaw slowly. His eyes popped.

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"My God!" he said.

"Movaine in there, Baldy?" Quillan inquired, coming up.

"Movaine! He . . . you . . . how—"

The chunky man took out his gun, waved it negligently at Quillan. "Tell the ape to blow, Perk. He isn't wanted here."

"Ape?" Quillan asked softly. His right hand moved, had the gun by the barrel, twisted, reversed the gun, jammed it back with some violence into the chunky man's stomach. "Ape?" he repeatel. The chunky man went white.

"Bad News—" Baldy Perk breathed. "Take it easy! That's Orca. He's the commodore's torpedo. How—"

"Where's Movaine?"

"Movaine . . . he . . . uh—"

"All right, he's not here. And Lancion can't have arrived yet. Is Cooms in there?"

"Yeah," Baldy Perk said weakly. "Cooms is in there, Quillan."

"Let's go in." Quillan withdrew the gun, slid it into a pocket, smiled down at Orca. "Get it back from your boss, slob. Be seeing you!"

Orca's voice was a husky whisper. "You will, friend! You will!"

The conference room was big and sparsely furnished. Four men sat at the long table in its center. Quillan knew two of them—Marras Cooms, second in command of the Beldon Brotherhood's detachment here, and the Duke of Fluel, Movaine's personal gun. Going by Heraga's descriptions, the big, florid-faced man with white hair and flowing white mustaches who was doing the talking was Velladon. the commodore; while the fourth man, younger, wiry, with thinning black hair plastered back across his skull, would be Ryter, chief of the Star's security force.

"What I object to primarily is that the attempt was made without obtaining my consent, and secretly," Velladon was saying, with a toothy grin but in a voice that shook with open fury. "And now it's been made and bungled, you have a nerve asking for our help. The problem is yours—and you better take care of it fast! I can't spare Ryter. If—"

"Cooms," Baldy Perk broke in desperately from the door, "Bad News Quillan's here an'—"

The heads of the four men at the table came around simultaneously. The eyes of two of them widened for an instant. Then Marras Cooms began laughing softly.

"Now everything's happened!" he said.

"Cooms," the commodore said testily, "I prefer not to be interrupted Now—"

"Can't be helped, commodore," Quillan said, moving forward, Perk shuffling along unhappily beside him. "I've got news for Movaine, and the news can't wait."

"Movaine?" the commodore repeated, blue eyes bulging at Quillan. "Movaine! Cooms, who *is* this man?"

"You're looking at Bad News Quillan," Cooms said. "A highjacking specialist, with somewhat numerous

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sidelines. But the point right now is that he isn't a member of the Brotherhood."

"*What!*" Velladon's big fist smashed down on the table. "*Now* what kind of a game . . . how did he get *in* here?"

"Well," Quillan said mildly, "I oozed in through the north wall about a minute ago. I—"

He checked, conscious of having created some kind of sensation. The four men at the table were staring up at him without moving. Baldy Perk appeared to be holding his breath. Then the commodore coughed, cleared his throat, drummed his fingers on the table.

He said reflectively: "He could have news—good or bad—at that! For all of us." He chewed on one of his mustache tips, grinned suddenly up at Quillan. "Well, sit down, friend! Let's talk. You can't talk to Movaine, you see. Movaine's, um, had an accident. Passed away suddenly half an hour ago."

"Sorry to hear it," Quillan said. "That's the sort of thing that happens so often in the Brotherhood." He swung a chair around, sat down facing the table. "You're looking well tonight, Fluel," he observed.

The Duke of Fluel, lean and dapper in silver jacket and tight-fitting silver trousers, gave him a wintry smile, said nothing.

"Now, then, friend," Velladon inquired confidentially, "just what was your business with Movaine?"

"Well, it will come to around twenty per cent of the take," Quillan informed him. "We won't argue about a half-million CR more or less. But around twenty per."

The faces turned thoughtful. After some seconds, the commodore asked, "And who's we?"

"A number of citizens," Quillan said, "who have been rather unhappy since discovering that you, too, are interested in Lady Pendrake and her pals. We'd gone to considerable expense and trouble to . . . well, her ladyship was scheduled to show up in Mezmiali, you know. And now she isn't going to show up there. All right, that's business. Twenty per—no hard feelings. Otherwise, it won't do you a bit of good to blow up the Star and the liner. There'd still be loose talk—maybe other complications, too. You know how it goes. You wouldn't be happy, and neither would Yaco. Right?"

The commodore's massive head turned back to Cooms. "How well do you know this man, Marras?"

Cooms grinned dryly. "Well enough."

"Is he leveling?"

"He'd be nuts to be here if he wasn't. And he isn't nuts—at least, not that way."

"There might be a question about that," Fluel observed. He looked at the commodore. "Why not ask him for a couple of the names that are in it with him?"

"Hagready and Boltan," Quillan said.

Velladon chewed the other mustache tip. "I know Hagready. If he—"

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"I know both of them," Cooms said. "Boltan works highjacking crews out of Orado. Quillan operates there occasionally."

"Pappy Boltan's an old business associate," Quillan agreed. "Reliable sort of a guy. Doesn't mind taking a few chances either."

Velladon's protruding blue eyes measured him a moment. "We can check on those two, you know—"

"Check away," Quillan said.

Velladon nodded. "We will." He was silent for a second or two, then glanced over at Cooms. "There've been no leaks on our side," he remarked. "And they must have known about this for weeks! Of all the inept, bungling—"

"Ah, don't be too hard on the Brotherhood, commodore," Quillan said. "Leaks happen. You ought to know."

"What do you mean?" Velladon snapped.

"From what we heard, the Brotherhood's pulling you out of a hole here. You should feel rather kindly toward them."

The commodore stared at him reflectively. Then he grinned. "Could be I should," he said. "Did you come here alone?"

"Yes."

The commodore nodded. "If you're bluffing, God help you. If you're not, your group's in. Twenty per. No time for haggling—we can raise Yaco's price to cover it." He stood up, and Ryter stood up with him. "Marras," the commodore went on, "tell him what's happened. If he's half as hot as he sounds, he's the boy to put on that job. Let him get in on a little of the work for the twenty per cent. Ryter, come on. We—"

"One moment, sir," Quillan interrupted. He took Orca's gun by the muzzle from his pocket, held it out to Velladon. "One of your men lost this thing. The one outside the door. If you don't mind—he might pout if he doesn't get it back."

The fifth level of the Executive Block appeared to be, as Heraga had said, quite small. The tiny entry hall, on which two walk-in portals opened, led directly into the large room where the two Pendrake rest cubicles had been placed. One of the cubicles now stood open. To right and left, a narrow passage stretched away from the room, ending apparently in smaller rooms.

Baldy Perk was perspiring profusely.

"Now right here," he said in a low voice, "was where I was standing. Movaine was over there, on the right of the cubicle, and Cooms was beside him. Rubero was a little behind me, hanging on to the punk—that Kinmarten. An' the Duke"—he nodded back at the wide doorspace to the hall—"was standing back there.

"All right. The punk's opened the cubicle a crack, looking like he's about to pass out while he's doin' it. This bearded guy, Eltak, stands in front of the cubicle, holding the gadget he controls the thing with—"

"Where's the gadget now?" Quillan asked.

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"Marras Cooms' got it."

"How does it work?"

Baldy shook his head. "We can't figure it out. It's got all kinds of little knobs and dials on it. Push this one an' it squeaks, turn that one an' it buzzes. Like that."

Quillan nodded. "All right. What happened?"

"Well, Movaine tells the old guy to go ahead an' do the demonstrating. The old guy sort of grins and fiddles with the gadget. The cubicle door pops open an' this thing comes pouring out. I never seen nothin' like it! It's like a barn door with dirty fur on it! It swirls up an' around an'—it wraps its upper end clean around poor Movaine. He never even screeches.

"Then everything pops at once. The old guy is laughing like crazy, an' that half-smart Rubero drills him right through the head. I take one shot at the thing, low so's not to hit Movaine, an' then we're all running. I'm halfway to the hall when Cooms tears past me like a rocket. The Duke an' the others are already piling out through the portal. I get to the hall, and there's this terrific smack of sound in the room. I look back . . . an' . . . an'—" Baldy paused and gulped.

"And what?" Quillan asked.

"There, behind the cubicles, I see poor Movaine stickin' halfway out o' the wall!" Baldy reported in a hushed whisper.

"*Half*way out of the wall?"

"From the waist up he's in it! From the waist down he's dangling into the room! I tell you, I never seen nothin' like it."

"And this Hlat creature—"

"That's gone. I figure the smack I heard was when it hit the wall flat, carrying Movaine. It went on into it. Movaine didn't—at least, the last half of him didn't."

"Well," Quillan said after a pause, "in a way, Movaine got his demonstration. The Hlats can move through solid matter and carry other objects along with them, as advertised. If Yaco can work out how it's done and build a gadget that does the same thing, they're getting the Hlats cheap. What happened then?"

"I told Marras Cooms about Movaine, and he sent me and a half dozen other boys back up here with riot guns to see what we could do for him. Which was nothin', of course." Baldy gulped again. "We finally cut this end of him off with a beam and took it back down."

"The thing didn't show up while you were here?"

Baldy shuddered and said, "Naw."

"And the technician . . . Eltak . . . was dead?"

"Sure. Hole in his head you could shove your fist through."

"Somebody," Quillan observel, "ought to drill Rubero for that stupid trick!"

"The Duke did—first thing after we got back to the fourth level."

"So the Hlat's on the loose, and all we really have at the moment are the cubicles . . . and Rest Warden Kinmarten. Where's he, by the way?"

"He tried to take off when we got

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down to Level Four, an' somebody cold-conked him. The doc says he ought to be coming around again pretty soon."

Quillan grunted, shoved the Miam Devil Special into its holster, said, "O.K., you stay here where you can watch the room and those passages and the hall. If you feel the floor start moving under you, scream. I'll take a look at the cubicle."

Lady Pendrake's cubicle was about half as big again as a standard one; but, aside from one detail, its outer settings, instruments, and operating devices appeared normal. The modification was a recess almost six feet long and a foot wide and deep, in one side, which could be opened either to the room or to the interior of the rest cubicle, but not simultaneously to both. Quillan already knew his purpose; the supposed other cubicle was a camouflaged food locker, containing fifty-pound slabs of sea beef, each of which represented a meal for the Hlat. The recess made it possible to feed it without allowing it to be seen, or, possibly, attempting to emerge. Kinmarten's nervousness, as reported by his wife, seemed understandable. Any rest warden might get disturbed over such a charge.

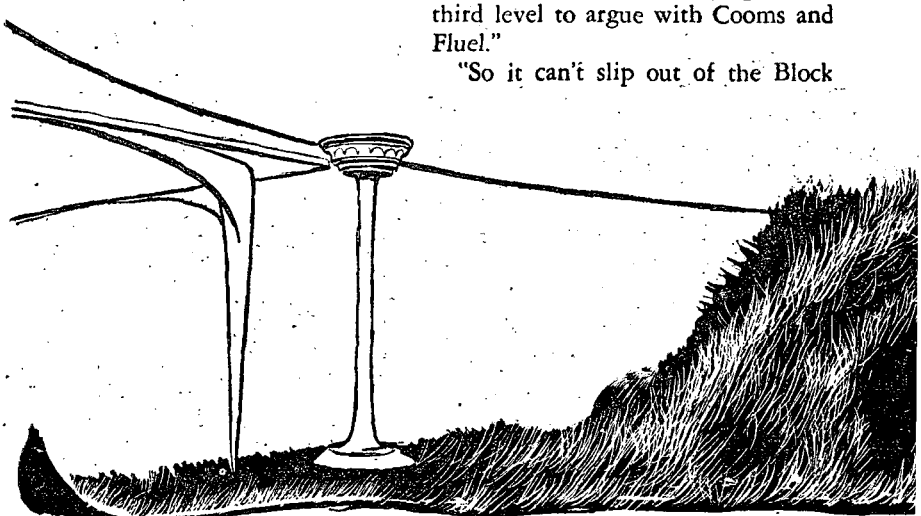
Quillan asked over his shoulder, "Anyone find out yet why the things can't get out of a closed rest cubicle?"

"Yeah," Baldy Perk said. "Kinmarten says it's the cubicle's defense fields. They could get through the material. They can't get through the field."

"Someone think to energize the Executive Block's battle fields?" Quillan inquired.

"Yeah. Velladon took care of that before he came screaming up to the third level to argue with Cooms and Fluel."

"So it can't slip out of the Block



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unless it shows itself down on the ground level when the entry lock's open."

"Yeah," Baldy muttered. "But I dunno. Is that good?"

Quillan looked at him. "Well, we *would* like it back."

"Why? There's fifty more coming in on the liner tonight."

"We don't have the fifty yet. If someone louses up that detail—"

"Yawk!" Baldy said faintly. There was a crash of sound as his riot gun went off. Quillan spun about, hair bristling, gun out. "What happened?"

"I'll swear," Baldy said, white-faced, "I saw something moving along that passage!"

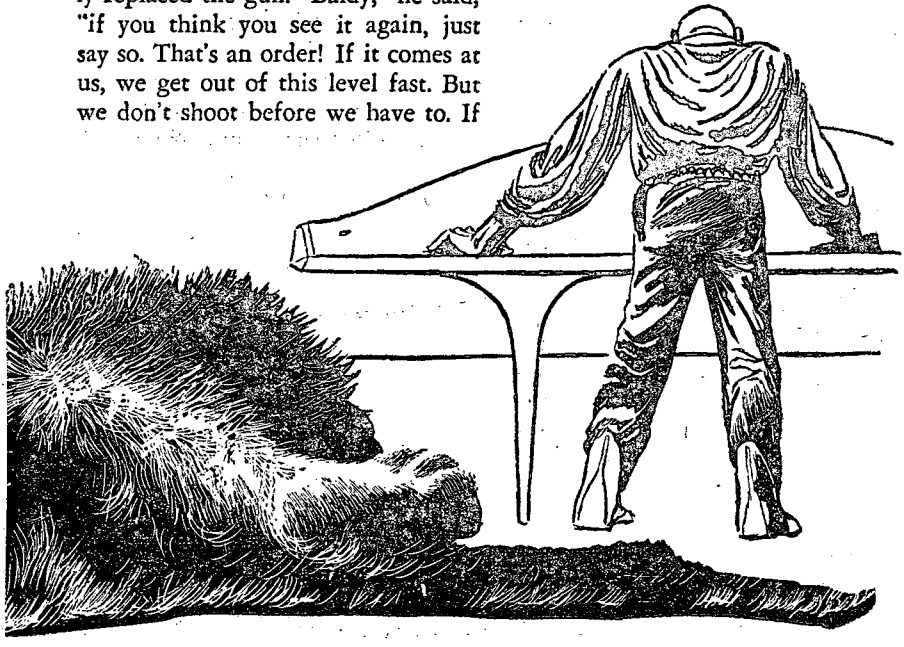
Quillan looked, saw nothing, slowly replaced the gun. "Baldy," he said, "if you think you see it again, just say so. That's an order! If it comes at us, we get out of this level fast. But we don't shoot before we have to. If we kill it, it's no good to us. Got that?"

"Yeah," Baldy said. "But I got an idea now, Bad News." He nodded at the other cubicle. "Let's leave that meat box open."

"Why?"

"If it's hungry," Baldy explained simply, "I'd sooner it wrapped itself around a few chunks of sea beef, an' not around me."

Quillan punched him encouragingly in the shoulder. "Baldy," he said, "in your own way, you *have* had an idea! But we won't leave the meat box open. When Kinmarten wakes up, I want him to show me how to bait this cubicle with a piece of sea beef, so it'll snap shut if the Hlat



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goes inside. Meanwhile it won't hurt if it gets a little hungry."

"That," said Baldy, "isn't the way *I* feel about it."

"There must be around a hundred and fifty people in the Executive Block at present," Quillan said. "Look at it that way! Even if the thing keeps stuffing away, your odds are pretty good, Baldy."

Baldy shuddered.

Aside from a dark bruise high on his forehead, Brock Kinmarten showed no direct effects of having been knocked out. However, his face was strained and his voice not entirely steady. It was obvious that the young rest warden had never been in a similarly unnerving situation before. But he was making a valiant effort not to appear frightened and, at the same time, to indicate that he would co-operate to the best of his ability with his captors.

He'd regained consciousness by the time Quillan and Perk returned to the fourth level, and Quillan suggested bringing him to Marras Cooms' private quarters for questioning. The Brotherhood chief agreed; he was primarily interested in finding out how the Hlat-control device functioned.

Kinmarten shook his head. He knew nothing about the instrument, he said, except that it was called a Hlat-talker. It was very unfortunate that Eltak had been shot, because Eltak undoubtedly could have told them all they wanted to know about it. If what he had told Kinmarten was true, Eltak had been directly involved in the development of the device.

"Was he some Federation scientist?" Cooms asked, fiddling absently with the mysterious cylindrical object.

"No, sir," the young man said. "But—again if what he told me was the truth—he was the man who actually discovered these Hlats. At least, he was the first man to discover them who wasn't immediately killed by them."

Cooms glanced thoughtfully at Quillan, then asked, "And where was that?"

Kinmarten shook his head again. "He didn't tell me. And I didn't really want to know. I was anxious to get our convoy to its destination, and then to be relieved of the assignment. I . . . well, I've been trained to act as Rest Warden to human beings, after all, not to monstrosities!" He produced an uncertain smile, glancing from one to the other of his interrogators. The smile promptly faded out again.

"You've no idea at all then about the place they came from?" Cooms asked expressionlessly.

"Oh, yes," Kinmarten said hastily. "Eltak talked a great deal about the Hlats, and actually—except for its location—gave me a fairly good picture of what the planet must be like. For one thing, it's an uncolonized world, of course. It must be terratype or very nearly so, because Eltak lived there for fifteen years with apparently only a minimum of equipment.

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The Hlats are confined to a single large island. He discovered them by accident and—"

"What was he doing there?"

"Well, sir, he came from Hyles-Frisian. He was a crim . . . he'd been engaged in some form of piracy, and when the authorities began looking for him, he decided it would be best to get clean out of the Hub. He cracked up his ship on this world and couldn't leave again. When he discovered the Hlats and realized their peculiar ability, he kept out of their way and observed them. He found out they had a means of communicating with each other, and that he could duplicate it. That stopped them from harming him, and eventually, he said, he was using them like hunting dogs. They were accustomed to co-operating with one another, because when there was some animal around that was too large for one of them to handle, they would attack it in a group . . ."

He went on for another minute or two on the subject. The Hlats—the word meant "rock lion" in one of the Hyles-Frisian dialects, describing a carnivorous animal which had some superficial resemblance to the creatures Eltak had happened on—frequented the seacoast and submerged themselves in sand, rocks and debris, whipping up out of it to seize some food animal, and taking it down with them again to devour it at leisure.

Quillan interrupted, "You heard what happened to the man it attacked on the fifth level?"

"Yes, sir."

"Why would the thing have left him half outside the wall as it did?"

Kinmarten said that it must simply have been moving too fast. It could slip into and out of solid substances without a pause itself, but it needed a little time to restructure an object it was carrying in the same manner. No more time, however, than two or three seconds—depending more on the nature of the object than on its size, according to Eltak.

"It can restructure *anything* in that manner?" Quillan asked.

Kinmarten hesitated. "Well, sir, I don't know. I suppose there might be limitations on its ability. Eltak told me the one we were escorting had been the subject of extensive experimentation during the past year, and that the results are very satisfactory."

"Suppose it carries a living man through a wall. Will the man still be alive when he comes out on the other side, assuming the Hlat doesn't kill him deliberately?"

"Yes, sir. The process itself wouldn't hurt him."

Quillan glanced at Cooms. "You know," he said, "we might be letting Yaco off too cheaply!"

Cooms raised an eyebrow warningly, and Quillan grinned. "Our friend will be learning about Yaco soon enough. Why did Eltak tell the creature to attack, Kinmarten?"

"Sir, I don't know," Kinmarten said. "He was a man of rather violent habits. My impression, however, was that he was simply attempting to obtain a hostage."

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"How did he get off that island with the Hlat?"

"A University League explorer was investigating the planet. Eltak contacted them and obtained the guarantee of a full pardon and a large cash settlement in return for what he could tell them about the Hlats. They took him and this one specimen along for experimentation."

"What about the Hlats on the *Camelot?*"

"Eltak said those had been quite recently trapped on the island."

Cooms ran his fingers over the cylinder, producing a rapid series of squeaks and whistles. "That's one thing Yaco may not like," he observed. "They won't have a monopoly on the thing."

Quillan shook his head. "Their scientists don't have to work through red tape like the U-League. By the time the news breaks—if the Federation ever intends to break it—Yaco will have at least a five-year start on everyone else. That's all an outfit like that needs." He looked at Kinmarten. "Any little thing you haven't thought to tell us, friend?" he inquired pleasantly.

A thin film of sweat showed suddenly on Kinmarten's forehead.

"No, sir," he said. "I've really told you everything I know. I—"

"Might try him under dope," Cooms said absently.

"Uh-uh!" Quillan said. "I want him wide awake to help me bait the cubicle for the thing. Has Velladon shown any indication of becoming willing to co-operate in hunting it?"

Cooms gestured with his head. "Ask Fluel! I sent him down to try to patch things up with the commodore. He just showed up again."

Quillan glanced around. The Duke was lounging in the doorway. He grinned slightly, said, "Velladon's still sore at us. But he'll talk to Quillan. Kinmarten here . . . did he tell you his wife's on the Star?"

Brock Kinmarten went utterly white. Cooms looked at him, said softly, "No, that must have slipped his mind."

Fluel said, "Yeah. Well, she is. And Ryter says they'll have her picked up inside half an hour. When they bring her in, we really should check on how candid Kinmarten's been about everything."

The rest warden said in a voice that shook uncontrollably, "Gentlemen, my wife knows absolutely nothing about these matters! I swear it! She—"

Quillan stood up. "Well, I'll go see if I can't get Velladon in a better mood. Are you keeping that Hlat-talker, Cooms?"

Cooms smiled. "I am."

"Marras figures," the Duke's flat voice explained, "that if the thing comes into the room and he squeaks at it a few times, he won't get hurt."

"That's possible," Cooms said, unruffled. "At any rate, I intend to hang on to it."

"Well, I wouldn't play around with those buttons too much," Quillan observed.

"Why not?"

"You might get lucky and tap out

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some pattern that spells 'Come to chow' in the Hlat's vocabulary."

There were considerably more men in evidence on Level Two than on the fourth, and fewer signs of nervousness. The Star men had been told of the Hlat's escape from its cubicle, but weren't taking it too seriously. Quillan was conducted to the commodore and favored with an alarmingly toothy grin. Ryter, the security chief, joined them a few seconds later. Apparently, Velladon had summoned him.

Velladon said, "Ryter here's made a few transmitter calls. We hear Pappy Boltan pulled his outfit out of the Orado area about a month ago. Present whereabouts unknown. Hagready went off on some hush-hush job at around the same time."

Quillan smiled. "Uh-huh! So he did."

"We also," said Ryter, "learned a number of things about you personally." He produced a thin smile. "You lead a busy and—apparently—profitable life."

"Business is fair," Quillan agreed. "But it can always be improved."

The commodore turned on the toothy grin. "So all right," he growled, "you're clear. We rather liked what we learned. Eh, Ryter?"

Ryter nodded.

"This Brotherhood of Beldon, now —" The commodore shook his head heavily.

Quillan was silent a moment. "They might be getting sloppy," he said. "I don't know. It's one possibility. They used to be a rather sharp outfit, you know."

"That's what I'd heard!" Velladon chewed savagely on his mustache, asked finally, "What's another possibility?"

Quillan leaned back in his chair. "Just a feeling, so far. But the business with the cubicle upstairs might have angles that weren't mentioned."

They looked at him thoughtfully. Ryter said, "Mind amplifying that?"

"Cooms told me," Quillan said, "that Nome Lancion had given Movaine instructions to make a test with Lady Pendrake on the quiet and find out if those creatures actually can do what they're supposed to do. I think he was telling the truth. Nome tends to be overcautious when it's a really big deal. Unless he's sure of the Hlats, he wouldn't want to be involved in a thing like blowing up the Star and the liner."

The commodore scowled absently. "Uh-huh," he said. "He knows *we* can't back out of it—"

"All right. The Brotherhood's full of ambitious men. Behind Lancion, Movaine was top man. Cooms behind him; Fluel behind Cooms. Suppose that Hlat-control device Cooms is hanging on to so tightly isn't as entirely incomprehensible as they make it out to be. Suppose Cooms makes a deal with Eltak. Eltak tickles the gadget, and the Hlat kills Movaine. Rubero immediately guns down Eltak—and is killed by Fluel a couple of minutes later, supposedly for blowing his top and killing the man who knew how to control the Hlat."

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Ryter cleared his throat. "Fluel was Movaine's gun," he observed.

"So he was," Quillan said. "Would you like the Duke to be yours?"

Ryter grinned, shook his head. "No, thanks!"

Quillan looked back at Velladon. "How well are you actually covered against the Brotherhood?"

"Well, *that's* air-tight," the commodore said. "We've got 'em outgunned here. When the liner lands, we'll be about even. But Lancion won't start anything. We're *too* even. Once we're clear of the Star, we don't meet again. We deal with Yaco individually. The Brotherhood has the Hlats, and we have the trained Federation technicians accompanying them, who . . . who—"

"Who alone are supposed to be able to inform Yaco how to control the Hlats," Ryter finished for him. The security chief's face was expressionless.

"By God!" the commodore said softly.

"Well, it's only a possibility that somebody's playing dirty," Quillan remarked. "We'd want to be sure of it. But if anyone can handle a Hlat with that control instrument, the Brotherhood has an advantage now that it isn't talking about—it can offer Yaco everything Yaco needs in one package. Of course, Yaco might still be willing to pay for the Hlat technicians. If it didn't, you and Ryter could make the same kind of trouble for it that my friends can."

The color was draining slowly from Velladon's face. "There's a difference," he said. "If *we* threaten to make trouble for Yaco, they'd see to it that our present employers learn that Ryter and I are still alive."

"That's the Mooleys, eh?"

"Yes."

"Tough." Quillan knuckled his chin thoughtfully. "Well, let's put it this way then," he said. "My group doesn't have *that* kind of problem, but if things worked out so that we'd have something more substantial than nuisance value to offer Yaco, we'd prefer it, of course."

Velladon nodded. "Very understandable! Under the circumstances, co-operation appears to be indicated, eh?"

"That's what I had in mind."

"You've made a deal," Velladon said. "Any immediate suggestions?"

Quillan looked at his watch. "A couple. We don't want to make any mistake about this. It's still almost five hours before the *Camelot* pulls in, and until she does you're way ahead on firepower. I wouldn't make any accusations just now. But you might mention to Cooms you'd like to borrow the Hlat gadget to have it examined by some of your technical experts. The way he reacts might tell us something. If he balks, the matter shouldn't be pushed too hard at the moment—it's a tossup whether you or the Brotherhood has a better claim to the thing.

"But then there's Kinmarten, the rest warden in charge of the cubicle. I talked with him while Cooms and Fluel were around, but he may have

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been briefed on what to say. Cooms mentioned doping him, which could be a convenient way of keeping him shut up, assuming he knows more than he's told. He's one of the personnel you're to offer Yaco. I think you can insist on having Kinmarten handed over to you immediately. It should be interesting again to see how Cooms reacts."

Velladon's big head nodded vigorously. "Good idea!"

"By the way," Quillan said, "Fluel mentioned you've been looking for Kinmarten's wife, the second rest warden on the Pendrake convoy. Found her yet?"

"Not a trace, so far," Ryter said.

"That's a little surprising, too, isn't it?"

"Under the circumstances," the commodore said, "it might not be surprising at all!" He had regained his color, was beginning to look angry. "If they—"

"Well," Quillan said soothingly, "we don't *know*. It's just that things do seem to be adding up a little. Now, there's one other point. We should do something immediately about catching that Hlat."

Velladon grunted and picked at his teeth with his thumbnail. "It would be best to get it back in its cubicle, of course. But I'm not worrying about it—just an animal, after all. Even the light hardware those Beldon fancy Dans carry should handle it. You use a man-sized gun, I see. So do I. If it shows up around here, it gets smeared, that's all. There're fifty more of the beasts on the *Camelot*."

Quillan nodded. "You're right on that. But there's the possibility that it is being controlled by the Brotherhood at present. If it is, it isn't just an animal any more. It could be turned into a thoroughly dangerous nuisance."

The commodore thought a moment, nodded. "You're right, I suppose. What do you want to do about it?"

"Baiting the cubicle on the fifth level might work. Then there should be life-detectors in the Star's security supplies—"

Ryter nodded. "We have a couple of dozen of them, but not in the Executive Block. They were left in the security building."

The commodore stood up. "You stay here with Ryter," he told Quillan. "There're a couple of other things I want to go over with you two. I'll order the life-detectors from the office here—second passage down, isn't it, Ryter? . . . And, Ryter, I have another idea. I'm pulling the man in space-armor off the subspace portal and detailing him to Level Five." He grinned at Quillan. "That boy's got a brace of grenades and built-in spray guns! If Cooms is thinking of pulling any funny stunts up there, he'll think again."

The commodore headed briskly down the narrow passageway, his big holstered gun slapping his thigh with every step. The two security guards stationed at the door to the second level office came to attention as he approached, saluted smartly. He

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grunted, went in without returning the salutes, and started over toward the ComWeb on a desk at the far end of the big room, skirting the long, dusty-looking black rug beside one wall.

Velladon unbuckled his gun belt, placed the gun on the desk, sat down and switched on the ComWeb.

Behind him, the black rug stirred silently and rose up.

"You called that one," Ryter was saying seven or eight minutes later, "almost too well!"

Quillan shook his head, poked at the commodore's gun on the desk with his finger, looked about the silent office and back at the door where a small group of security men stood staring in at them.

"Three men gone without a sound!" he said. He indicated the glowing disk of the ComWeb. "He had time enough to turn it on, not time enough to make his call. Any chance of camouflaged portals in this section?"

"No," Ryter said. "I know the location of every portal in the Executive Block. No number of men could have taken Velladon and the two guards without a fight anyway. We'd have heard it. It didn't happen that way."

"Which leaves," Quillan said, "one way it could have happened." He jerked his head toward the door. "Will those men keep quiet?"

"If I tell them to."

"Then play it like this. Two guards have vanished. The Hlat obviously did it. The thing's deadly. That'll keep every man in the group on the alert every instant from now on. But we don't say Velladon has vanished. He's outside in the Star at the moment, taking care of something."

Ryter licked his lips. "What does that buy us?"

"If the Brotherhood's responsible for this—"

"I don't take much stock in coincidences," Ryter said.

"Neither do I. But the Hlat's an animal; it can't tell them it's carried out the job. If they don't realize we suspect them, it gives us some advantage. For the moment, we just carry on as planned, and get rid of the Hlat in one way or another as the first step. The thing's three times as dangerous as anyone suspected—except, apparently, the Brotherhood. Get the life-detectors over here as soon as you can, and slap a space-armor guard on the fifth level."

Ryter hesitated, nodded. "All right."

"Another thing," Quillan said. "Cooms may have the old trick in mind of working from the top down. If he can take you out along with a few other key men, he might have this outfit demoralized to the point of making up for the difference in the number of guns—especially if the Hlat's still on his team. You'd better keep a handful of the best boys you have around here glued to your back from now on."

Ryter smiled bleakly. "Don't worry. I intend to. What about you?"

"I don't think they're planning on

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giving me any personal attention at the moment. My organization is outside, not here. And it would look odd to the Brotherhood if I started dragging a few Star guards around with me at this point."

Ryter shrugged. "Suit yourself. It's your funeral if you've guessed wrong."

"There was nothing," Quillan told Marras Cooms, "that you could actually put a finger on. It was just that I got a very definite impression that the commodore and Ryter may have something up their sleeves. Velladon's looking too self-satisfied to suit me."

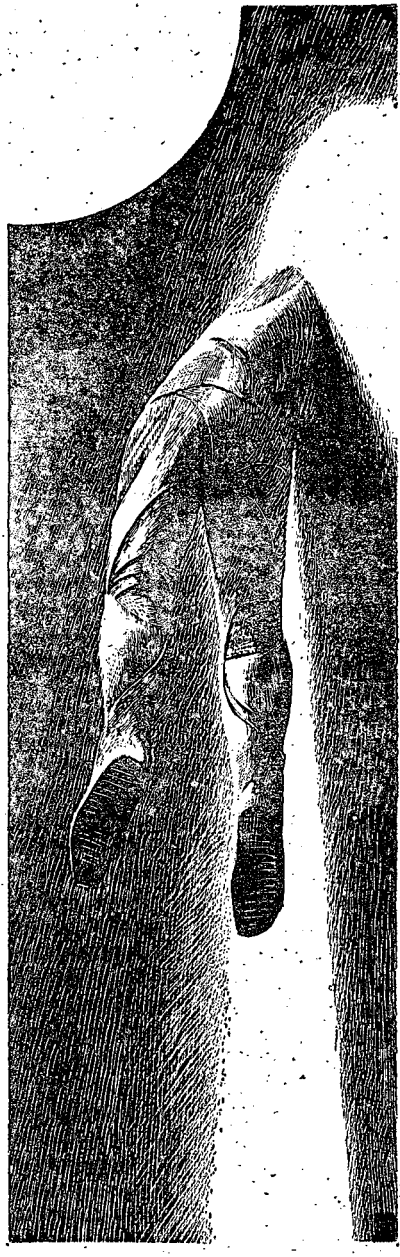
The Brotherhood chief gnawed his lower lip reflectively. He seemed thoughtful, not too disturbed. Cooms might be thoroughly afraid of the escaped Hlat, but he wouldn't have reached his present position in Nome Lancion's organization if he had been easily frightened by what other men were planning.

He said, "I warned Movaine that if Velladon learned we'd checked out the Hlat, he wasn't going to like it."

"He doesn't," Quillan said. "He regards it as something pretty close to an attempted double cross."

Cooms grinned briefly. "It was."

"Of course. The question is, what can he do about it? He's got you outgunned two to one, but if he's thinking of jumping you before Lancion gets here, he stands to lose more men than he can afford to without endangering the entire operation for himself."



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Cooms was silent a few seconds. "There's an unpleasant possibility which didn't occur to me until a short while ago," he said then. "The fact is that Velladon actually may have us outgunned here by something like four to one. If that's the case, he can afford to lose quite a few men. In fact, he'd prefer to."

Quillan frowned. "*Four* to one? How's that?"

Cooms said, "The commodore told us he intended to let only around half of the Seventh Star's security force in on the Hlat deal. The other half was supposed to have been dumped out of one of the subspace section's locks early today, without benefit of suits. We had no reason to disbelieve him. Velladon naturally would want to cut down the number of men who got in on the split with him to as many as he actually needed. But if he's been thinking about eliminating us from the game, those other men may still be alive and armed."

Quillan grunted. "I see. You know, that could explain something that looked a little odd to me."

"What was that?" Cooms asked.

Quillan said, "After they discovered down there that two of their guards were missing and decided the Hlat must have been on their level, I tried to get hold of the commodore again. Ryter told me Velladon won't be available for a while, that he's outside in the Star, taking care of something there. I wondered what could be important enough to get Velladon to leave the Executive Block at present, but—"

"Brother, I'm way ahead of you!" Cooms said. His expression hardened. "That doesn't look good. But at least he can't bring in reinforcements without tipping us off. We've got our own guards down with theirs at the entrance."

Quillan gave him a glance, then nodded at the wall beyond them. "That's a portal over there, Marras. How many of them on this level?"

"Three or four. Why? The outportals have been plugged, man! Sealed off. Fluel checked them over when we moved in."

"Sure they're sealed." Quillan stood up, went to the portal, stood looking at the panel beside it a moment, then pressed on it here and there, and removed it. "Come over here, friend. I suppose portal work's been out of your line. I'll show you how fast a thing like that can get *un*plugged!"

He slid a pocketbook-sized tool kit out of his belt, snapped it open. About a minute later, the lifeless VACANT sign above the portal flickered twice, then acquired a steady white glow.

"Portal in operation," Quillan announced. "I'll seal it off again now. But that should give you the idea."

Cooms' tongue flicked over his lips. "Could somebody portal through to this level from the Star while the exits are sealed here?"

"If the mechanisms have been set for that purpose, the portals can be opened again at any time from the Star side. The Duke's an engineer of sorts, isn't he? Let him check on it.

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He should have been thinking of the point himself, as far as that goes. Anyway, Velladon can bring in as many men as he likes to his own level without using the main entrance." He considered. "I didn't see anything to indicate that he's started doing it —"

Marras Cooms shrugged irritably. "That means nothing! It would be easy enough to keep half a hundred men hidden away on any of the lower levels."

"I suppose that's right. Well, if the commodore intends to play rough, you should have some warning anyway."

"What kind of warning?"

"There's Kinmarten and that Hlat-talking gadget, for example," Quillan pointed out. "Velladon would want both of those in his possession and out of the way where they can't get hurt before he starts any shooting."

Cooms looked at him for a few seconds. "Ryter," he said then, "sent half a dozen men up here for Kinmarten just after you got back! Velladon's supposed to deliver the Hlats' attendants to Yaco, so I let them have Kinmarten." He paused. "They asked for the Hlat-talker, too."

Quillan grunted. "Did you give them that?"

"No."

"Well," Quillan said after a moment, "that doesn't necessarily mean that we're in for trouble with the Star group. But it does mean, I think, that we'd better stay ready for it!" He stood up. "I'll get back down there and go on with the motions of getting the hunt for the Hlat organized. Velladon would sooner see the thing get caught, too, of course, so he shouldn't try to interfere with that. If I spot anything that looks suspicious, I'll get the word to you."

"I never," said Orca, unconsciously echoing Baldy Perk, "saw anything like it!" The commodore's chunky little gunman was ashen-faced. The circle of Star men standing around him hardly looked happier. Most of them were staring down at the empty lower section of a suit of space armor which appeared to have been separated with a neat diagonal slice from its upper part.

"Let's get it straight," Ryter said, a little unsteadily. "You say this half of the suit was lying against the wall like *that?*"

"Not exactly," Quillan told him. "When we got up to the fifth level, the suit was stuck against the wall—like that—about eight feet above the floor. That was in the big room where the cubicles are. When Kinmarten and Orca and I finally got the suit worked away from the wall, I expected frankly that we'd find half the body of the guard still inside. But he'd vanished."

Ryter cleared his throat. "Apparently," he said, "the creature drew the upper section of the suit into the wall by whatever means it uses, then stopped applying the transforming process to the metal, and simply moved on with the upper part of the suit and the man."

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Quillan nodded. "That's what it looks like."

"But he had *two grenades!*" Orca burst out. "He had sprayguns! How could it get him that way?"

"Brother," Quillan said, "grenades won't help you much if you don't spot what's moving up behind you!"

Orca glared speechlessly at him. Ryter said, "All right! We've lost another man. We're not going to lose any more. We'll station no more guards on the fifth level. Now, get everyone who isn't on essential guard duty to the main room, and split 'em up into life-detector units. Five men to each detail, one to handle the detector, four to stay with him, guns out. If the thing comes back to this level, we want to have it spotted the instant it arrives. Orca, you stay here —and keep *your* gun out!"

The men filed out hurriedly. Ryter turned to Quillan. "Were you able to get the cubicle baited?"

Quillan nodded. "Kinmarten figured out how the thing should be set for the purpose. If the Hlat goes in after the sea beef, it's trapped. Of course, if the hunting it's been doing was for food, it mightn't be interested in the beef."

"We don't know," Ryter said, "that the hunting it's been doing was for food."

"No. Did you manage to get the control device from Cooms?"

Ryter shook his head. "He's refused to hand it over."

"If you tried to take it from him," Quillan said, "you might have a showdown on your hands."

"And if this keeps on," Ryter said, "I may prefer a showdown! Another few rounds of trouble with the Hlat, and the entire operation could blow up in our faces! The men aren't used to that kind of thing. It's shaken them up. If we've got to take care of the Brotherhood, I'd rather do it while I still have an organized group. Where did you leave Kinmarten, by the way?"

"He's back in that little room with his two guards," Quillan said.

"Well, he should be all right there. We can't spare—" Ryter's body jerked violently. *"What's that?"*

There had been a single thudding crash somewhere in the level. Then shouts and cursing.

"Main hall!" Quillan said. "Come on!"

The main hall was a jumble of excitedly jabbering Star men when they arrived there. Guns waved about, and the various groups were showing a marked tendency to stand with their backs toward one another and their faces toward the walls.

Ryter's voice rose in a shout that momentarily shut off the hubbub. *"What's going on here?"*

Men turned, hands pointed, voices babbled again. Someone nearby said sharply and distinctly, ". . . Saw it drop right out of the ceiling!" Farther down the hall, another group shifted aside enough to disclose it had been clustered about something which looked a little like the empty shell of a gigantic black beetle.

The missing section of the suit of

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space armor had been returned. But not its occupant.

Quillan moved back a step, turned, went back down the passage from which they had emerged, pulling the Miam Devil from its holster. Behind him the commotion continued; Ryter was shouting something about getting the life-detector units over there. Quillan went left down the first intersecting corridor, right again on the following one, keeping the gun slightly raised before him. Around the next corner, he saw the man on guard over the portal connecting the building levels facing him, gun pointed.

"What happened?" the guard asked shakily.

Quillan shook his head, coming up. "That thing got another one!"

The guard breathed, "By God!" and lowered his gun a little. Quillan raised his a little, the Miam Devil grunted, and the guard sighed and went down. Quillan went past him along the hall, stopped two doors beyond the portal and rapped on the locked door.

"Quillan here! Open up!"

The door opened a crack, and one of Kinmarten's guards looked out questioningly. Quillan shot him through the head, slammed on into the room across the collapsing body, saw the second guard wheeling toward him, shot again, and slid the gun back into the holster. Kinmarten, standing beside a table six feet away, right hand gripping a heavy marble ashtray, was staring at him in white-faced shock.

"Take it easy, chum!" Quillan said, turning toward him. "I—"

He ducked hurriedly as the ashtray came whirling through the air toward his head. An instant later, a large fist smacked the side of Kinmarten's jaw. The rest warden settled limply to the floor.

"Sorry to do that, pal," Quillan muttered, stooping over him. "Things are rough all over right now." He hauled Kinmarten upright, bent, and had the unconscious young man across his shoulder. The hall was still empty except for the body of the portal guard. Quillan laid Kinmarten on the carpet before the portal, hauled the guard off into the room, and pulled the door to the room shut behind him as he came out. Picking up Kinmarten, he stepped into the portal with him and jabbed the fifth level button. A moment later, he moved out into the small dim entry hall on the fifth level, the gun in his right hand again.

He stood there silently for some seconds, looking about him listening. The baited cubicle yawned widely at him from the center of the big room. Nothing seemed to be stirring. Kinmarten went back to the floor. Quillan moved over to the panel which concealed the other portal's mechanisms.

He had the outportal unsealed in considerably less than a minute this time, and slapped the panel gently back in place. He turned back to Kinmarten and started to bend down for him, then straightened quietly again, turning his head.

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Had there been a flicker of shadowy motion just then at the edge of his vision, behind the big black cube of the Hlat's food locker? Quillan remained perfectly still, the Miam Devil ready and every sense straining for an indication that the thing was there—or approaching stealthily now, gliding behind the surfaces of floor or ceiling or walls like an underwater swimmer.

But half a minute passed and nothing else happened. He went down on one knee beside Kinmarten, the gun still in his right hand. With his left, he carefully wrestled the rest warden back up across his shoulder, came upright, moved three steps to the side, and disappeared in the outportal.

Reetal Destone unlocked the entry door to her suite and stepped hurriedly inside, letting the door slide shut behind her. She crossed the room to the ComWeb stand and switched on the playback. There was the succession of tinkling tones which indicated nothing had been recorded.

She shut the instrument off again, passing her tongue lightly over her lips. No further messages from Heraga . . .

And none from Quillan.

She shook her head, feeling a surge of sharp anxiety, glanced at her watch and told herself that, after all, less than two hours had passed since Quillan had gone into the Executive Block. Heraga reported there had been no indications of disturbance or excitement when he passed through the big entrance hall on his way out. So Quillan, at any rate, had succeeded in bluffing his way into the upper levels.

It remained a desperate play, at best.

Reetal went down the short passage to her bedroom. As she came into the room, her arms were caught from the side at the elbows, pulled suddenly and painfully together behind her. She stood still, frozen with shock.

"In a hurry, sweetheart?" Fluel's flat voice said.

Reetal managed a breathless giggle. "Duke! You startled me! How did you get in?"

She felt one hand move up her arm to her shoulder. Then she was swung about deftly and irresistibly, held pinned back against the wall, still unable to move her arms.

He looked at her a moment, asked, "Where are you hiding it this time?"

"Hiding what, Duke?"

"I've been told sweet little Reetal always carries a sweet little gun around with her in some shape or form or other."

Reetal shook her head, her eyes widening. "Duke, what's the matter? I . . ."

He let go of her suddenly, and his slap exploded against the side of her face. Reetal cried out, dropping her head between her hands. Immediately he had her wrists again, and her fingers were jerked away from the jeweled ornament in her hair.

"So that's where it is!" Fluel said. "Thought it might be. Don't get

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funny again now, sweetheart. Just stay quiet."

She stayed quiet, wincing a little as he plucked the glittering little device out of her hair. He turned it around in his fingers, examining it, smiled and slid it into an inside pocket, and took her arm again. "Let's go to the front room, Reetal," he said almost pleasantly. "We've got a few things to do."

A minute later, she was seated sideways on a lounger, her wrists fastened right and left to its armrests. The Duke placed a pocket recorder on the floor beside her. "This is a crowded evening, sweetheart," he remarked, "which is lucky for you in a way. We'll have to rush things along a little. I'll snap the recorder on in a minute so you can answer questions —No, keep quiet. Just listen very closely now, so you'll know what the right answers are. If you get rattled and gum things up, the Duke's going to get annoyed with you."

He sat down a few feet away from her, hitched his shoulders to straighten out the silver jacket, and lit a cigarette. "A little while after Bad News Quillan turned up just now," he went on, "a few things occurred to me. One of them was that a couple of years ago you and he were operating around Beldon at about the same time. I thought, well, maybe you knew each other; maybe not. And then—"

"Duke," Reetal said uncertainly, "just what are you talking about? I don't know—"

"Shut up." He reached over, tapped her knee lightly with his fingertips. "Of course, if you want to get slapped around, all right. Otherwise, don't interrupt again. Like I said, you're in luck; I don't have much time to spend here. You're getting off very easy. Now just listen.

"Bad News knew a lot about our operation and had a story to explain that. If the story was straight, we couldn't touch him. But I was wondering about the two of you happening to be here on the Star again at the same time. A team maybe, eh? But he didn't mention you as being in on the deal. So what was the idea?

"And then, sweetheart, I remembered something else—and that tied it in. Know that little jolt people sometimes get when they're dropping off to sleep? Of course. Know another time they sometimes get it? When they're snapping back out of a Moment of Truth, eh? I remembered suddenly I'd felt a little jump like that while we were talking today. Might have been a reflex of some kind. Of course, it didn't occur to me at the time you could be pulling a lousy stunt like that on old Duke. Why take a chance on getting your neck broken?

"But, sweetheart, that's the tie-in! Quillan hasn't told it straight. He's got no backing. He's on his own. There's no gang outside somewhere that knows all about our little deal. He got his information right here, from you. And you got it from dumb old Duke, eh?"

"Duke," Reetal said quite calmly,

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"can I ask just one question?"

He stared bleakly at her a moment, then grinned. "It's my night to be big-hearted, I guess. Go ahead."

"I'm not trying to argue. But it simply doesn't make sense. If I learned about this operation you're speaking of from you, what reason could I have to feed you Truth in the first place? There'd be almost a fifty-fifty chance that you'd spot it immediately. Why should I take such a risk? Don't you see?"

Fluel shrugged, dropped his cigarette and ground it carefully into the carpet with the tip of his shoe.

"You'll start answering those questions yourself almost immediately, sweetheart! Let's not worry about that now. Let me finish. Something happened to Movaine couple of hours ago. Nobody's fault. And something else happened to Marras Cooms just now. That puts me in charge of the operation here. Nice, isn't it? When we found Cooms lying in the hall with a hole through his stupid head, I told Baldy Perk it looked like Bad News had thrown in with the Star boys and done it. Know Baldy? He's Cooms' personal gun. Not what you'd call bright, and he's mighty hot now about Cooms. I left him in charge on our level, with orders to get Quillan the next time he shows up there. Well and good. The boys know Bad News' rep too well to try asking him questions. They won't take chances with him. They'll just gun him down together the instant they see him."

He paused to scuff his shoe over the mark the cigarette had left on the carpet, went on, "But there's Nome Lancion now. He kind of liked Cooms, and he might get suspicious. When there's a sudden vacancy in the organization like that, Nome takes a good look first at the man next in line. He likes to be sure the facts are as stated.

"So now you know the kind of answers from you I want to hear go down on the recorder, sweetheart. And be sure they sound right. I don't want to waste time on replays. You and Quillan were here on the Star. You got some idea of what was happening, realized you were due to be vaporized along with the rest of them after we left. There was no way out of the jam for you unless you could keep the operation from being carried out. You don't, by the way, mention getting any of that information from me. I don't want Lancion to think I'm beginning to get dopey. You and Quillan just cooked up this story, and he managed to get into the Executive Block. The idea being to knock off as many of the leaders as he could, and mess things up."

Fluel picked up the recorder, stood up, and placed it on the chair. "That's all you have to remember. You're a smart girl; you can fill in the details any way you like. Now let's get started—"

She stared at him silently for an instant, a muscle beginning to twitch in her cheek. "If I do that," she said, "if I give you a story Nome will like, what happens next?"

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Fluel shrugged. "Just what you're thinking happens next. You're a dead little girl right now, Reetal. Might as well get used to the idea. You'd be dead anyhow four, five hours from now, so that shouldn't make too much difference. What makes a lot of difference is just how unpleasant the thing can get."

She drew a long breath. "Duke, I —"

"You're stalling, sweetheart."

"Duke, give me a break. I really didn't know a thing about this. I—"

He looked down at her for a moment. "I gave you a break," he said. "You've wasted it. Now we'll try it the other way. If we work a few squeals into the recording, that'll make it more convincing to Lancion. He'll figure little Reetal's the type who wouldn't spill a thing like that without a little pressure." He checked himself, grinned. "And that reminds me. When you're talking for the record, use your own voice."

"My own voice?" she half whispered.

"Nome will remember what you sound like—and I've heard that voice imitations are part of your stock in trade. You might think it was cute if Nome got to wondering after you were dead whether that really had been you talking. Don't try it, sweetheart."

He brought a glove out of his jacket pocket, slipped it over his left hand, flexing his fingers to work it into position. Reetal's eyes fastened on the rounded metal tips capping thumb, forefinger and middle finger of the glove. Her face went gray.

"Duke," she said. "No—"

"Shut up." He brought out a strip of transparent plastic, moved over to her. The gloved hand went into her hair, gripped it, turned her face up. He laid the plastic gag lengthwise over her mouth, pressed it down and released it. Reetal closed her eyes.

"That'll keep it shut," he said. "Now—" His right hand clamped about the back of her neck, forcing her head down and forward almost to her knees. The gloved left hand brushed her hair forwards, then its middle finger touched the skin at a point just above her shoulder blades.

"Right there," Fluel said. The finger stiffened, drove down.

Reetal jerked violently, twisted, squirmed sideways, wrists straining against the grip of the armrests. Her breath burst out of her nostrils, followed by squeezed, whining noises. The metal-capped finger continued to grind savagely against the nerve center it had found.

"Thirty," Fluel said finally. He drew his hand back, pulled her upright again, peeled the gag away from her lips. "Only thirty seconds, sweetheart. Think you'd sooner play along now?"

Reetal's head nodded.

"Fine. Give you a minute to steady up. This doesn't really waste much time, you see—" He took up the recorder, sat down on the chair again, watching her. She was breathing raggedly and shallowly, eyes wide and incredulous. She didn't look at him.

The Duke lit another cigarette.

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"Incidentally," he observed, "if you were stalling because you hoped old Bad News might show up, forget it. If the boys haven't gunned him down by now, he's tied up on a job the commodore gave him to do. He'll be busy another hour or two on that. He—"

He checked himself. A central section of the wall paneling across the room from him had just dilated open. Old Bad News stood in the concealed suite portal, Rest Warden Kinmarten slung across his shoulder.

Both men moved instantly. Fluel's long legs bounced him sideways out of the chair, right hand darting under his coat, coming out with a gun. Quillan turned to the left to get Kinmarten out of the way. The big Miam Devil seemed to jump into his hand. Both guns spoke together.

Fluel's gun thudded to the carpet. The Duke said, "Ah-aa-ah!" in a surprised voice, rolled up his eyes, and followed the gun down.

Quillan said, stunned, "He was fast! I felt that one parting my hair."

He became very solicitous then—after first ascertaining that Fluel had left the Executive Block unaccompanied, on personal business. He located a pain killer spray in Reetal's bedroom and applied it to the bruised point below the back of her neck. She was just beginning to relax gratefully, as the warm glow of the spray washed out the pain and the feeling of paralysis, when Kinmarten, lying on the carpet nearby, began to stir and mutter.

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Quillan hastily put down the spray.

"Watch him!" he cautioned. "I'll be right back. If he sits up, yell. He's a bit wild at the moment. If he wakes up and sees the Duke lying there, he'll start climbing the walls."

"What—" Reetal began. But he was gone down the hall.

He returned immediately with a glass of water, went down on one knee beside Kinmarten, slid an arm under the rest warden's shoulder, and lifted him to a sitting position.

"Wake up, old pal!" he said loudly. "Come on, wake up! Got something good for you here—"

"What are you giving him?" Reetal asked, cautiously massaging the back of her neck.

"Knockout drops. I already had to lay him out once. We want to lock him up with his wife now, and if he comes to and tells her what's happened, they'll both be out of their minds by the time we come to let them out—"

He interrupted himself. Kinmarten's eyelids were fluttering. Quillan raised the glass to his lips. "Here you are, pal," he said in a deep, soothing voice. "Drink it! It'll make you feel a lot better."

Kinmarten swallowed obediently, swallowed again. His eyelids stopped fluttering. Quillan lowered him back to the floor.

"That ought to do it," he said.

"What," Reetal asked, "did happen? The Duke—"

"Tell you as much as I can after we get Kinmarten out of the way. I have to get back to the Executive Block. Things are sort of teetering on the edge there." He jerked his head at Fluel's body. "I want to know about him, too, of course. Think you can walk now?"

Reetal groaned. "I can try," she said.

They found Solvey Kinmarten dissolved in tears once more. She flung herself on her husband's body when Quillan placed him on the bed. "What have those *beasts* done to Brock?" she demanded fiercely.

"Nothing very bad," Quillan said soothingly. "He's, um, under sedation at the moment, that's all. We've got him away from them now, and he's safe . . . look at it that way. You stay here and take care of him. We'll have the whole deal cleared up before morning, doll. Then you can both come out of hiding again." He gave her an encouraging wink.

"I'm so very grateful to both of you—"

"No trouble, really. But we'd better get back to work on the thing."

"Heck," Quillan said a few seconds later, as he and Reetal came out on the other side of the portal, "I feel like hell about those two. Nice little characters! Well, if the works blow up, they'll never know it."

"*We'll* know it," Reetal said meaningly. "Start talking."

He rattled through a brief account of events in the Executive Block, listened to her report on the Duke's visit, scratched his jaw reflectively.

"That might help!" he observed. "They're about ready to jump down

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each other's throats over there right now. A couple more pushes—" He stood staring down at the Duke's body for a moment. Blood soiled the back of the silver jacket, seeping out from a tear above the heart area. Quillan bent down, got his hands under Fluel's armpits, hauled the body upright.

Reetal asked, startled, "What are you going to do with it?"

"Something useful, I think. And wouldn't that shock the Duke . . . the first time he's been of any use to anybody. Zip through the Star's ComWeb directory, doll, and get me the call symbol for Level Four of the Executive Block!"

Solvey Kinmarten dimmed the lights a trifle in the bedroom, went back to Brock, rearranged the pillows under his head, and bent down to place her lips tenderly to the large bruises on his forehead and the side of his jaw. Then she brought a chair up beside the bed, and sat down to watch him.

Perhaps a minute later, there was a slight noise behind her. Startled, she glanced around, saw something huge, black and shapeless moving swiftly across the carpet of the room toward her.

Solvey quietly fainted.

"Sure you know what to say?" Quillan asked.

Reetal moistened her lips. "Just let me go over it in my mind once more." She was sitting on the floor, on the right side of the ComWeb stand, her face pale and intent. "You know," she said, "this makes me feel a little queasy somehow, Quillan! And suppose they don't fall for it?"

"They'll fall for it!" Quillan was on his knees in front of the stand, supporting Fluel's body, which was sprawled half across it, directly before the lit vision screen. An outflung arm hid the Duke's face from the screen. "You almost had *me* thinking I was listening to Fluel when you did the take-off on him this evening. A dying man can be expected to sound a little odd, anyway." He smiled at her encouragingly. "Ready now?"

Reetal nodded nervously, cleared her throat.

Quillan reached across Fluel, tapped out Level Four's call symbol on the instrument, ducked back down below the stand. After a moment, there was a click.

Reetal produced a quavering, agonized groan. Somebody else gasped.

"Duke!" Baldy Perk's voice shouted. "What's happened?"

"Baldy Perk!" Quillan whispered quickly.

Reetal stammered hoarsely, "The c-c-commodore, Baldy! Shot me . . . shot Marras! They're after . . . Quillan . . . now!"

"I thought Bad News . . ." Baldy sounded stunned.

"Was w-wrong, Baldy," Reetal croaked. "Bad News . . . with us! Bad News . . . pal! The c-c-comm —"

Beneath the ComWeb stand the palm of Quillan's right hand thrust

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sharply up and forward. The stand tilted, went crashing back to the floor. Fluel's body lurched over with it. The vision screen shattered. Baldy's roaring question was cut off abruptly.

"Great stuff, doll!" Quillan beamed, helping Reetal to her feet. "You sent shudders down my back!"

"Down mine, too!"

"I'll get him out of here now. Ditch him in one of the shut-off sections. Then I'll get back to the Executive Block. If Ryter's thought to look into Kinmarten's room, they'll really be raving on both sides there now!"

"Is that necessary?" Reetal asked. "For you to go back, I mean. Somebody besides Fluel might have become suspicious of you by now."

"Ryter might," Quillan agreed. "He's looked like the sharpest of the lot right from the start. But we'll have to risk that. We've got all the makings of a shooting war there now, but we've got to make sure it gets set off before somebody thinks of comparing notes. If I'm around, I'll keep jolting at their nerves."

"I suppose you're right. Now, our group—"

Quillan nodded. "No need to hold off on that any longer, the way things are moving. Get on another Com-Web and start putting out those Mayday messages right now! As soon as you've rounded the boys up—"

"That might," Reetal said, "take a little less than an hour."

"Fine. Then move them right into the Executive Block. With just a bit of luck, one hour from now should land them in the final stages of a beautiful battle on the upper levels. Give them my description and Ryter's, so we don't have accidents."

"Why Ryter's?"

"Found out he was the boy who took care of the bomb-planting detail. We want him alive. The others mightn't know where it's been tucked away. Heraga says the clerical staff and technicians in there are all wearing the white Star uniforms. Anyone else who isn't in one of those uniforms is fair game—" He paused. "Oh, and tip them off about the Hlat! God only knows what that thing will be doing when the ruckus starts."

"What about sending a few men in through the fifth level portal, the one you've unplugged?"

Quillan considered, shook his head. "No. Down on the ground level is where we want them. They'd have to portal there again from the fifth, and a portal is too easy to seal off and defend. Now let's get a blanket or something to tuck Fluel into. I don't want to feel conspicuous if I run into somebody on the way."

Quillan emerged cautiously from the fifth portal in the Executive Block a short while later, came to a sudden stop just outside it. In the big room beyond the entry hall, the door of the baited cubicle was closed, and the life-indicator on the door showed a bright steady green glow.

Quillan stared at it a moment, looking somewhat surprised, then went quietly into the room and bent

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to study the cubicle's instruments. A grin spread slowly over his face. The trap had been sprung. He glanced at the deep-rest setting and turned it several notches farther down.

"Happy dreams, Lady Pendrake!" he murmured. "That takes care of you. What an appetite! And now—"

As the Level Four portal dilated open before him, a gun blazed from across the hall. Quillan flung himself out and down, rolled to the side, briefly aware of a litter of bodies and tumbled furniture farther up the hall. Then he was flat on the carpet, gun out before him, pointing back at the overturned, ripped couch against the far wall from which the fire had come.

A hoarse voice bawled, "Bad News —hold it!"

Quillan hesitated, darting a glance right and left. Men lying about everywhere, the furnishings a shambles. "That you, Baldy?" he asked.

"Yeah," Baldy Perk half sobbed. "I'm hurt—"

"What happened?"

"*Star* gang jumped us. Portaled in here—spitballs and riot guns! Bad News, we're clean wiped out! Everyone that was on this level—"

Quillan stood up, holstering the gun, went over to the couch and moved it carefully away from the wall. Baldy was crouched behind it, kneeling on the blood-soaked carpet, gun in his right hand. He lifted a white face, staring eyes, to Quillan.

"Waitin' for 'em to come back," he muttered. "Man, I'm not for long! Got hit twice. Near passed out a couple of times already."

"What about your boys on guard downstairs?"

"Same thing there, I guess . . . or they'd have showed up. They got Cooms and the Duke, too! Man, it all happened fast!"

"And the crew on the freighter?"

"Dunno about them."

"You know the freighter's call number?"

"Huh? Oh, yeah. Sure. Never thought of that," Baldy said wearily. He seemed dazed now.

"Let's see if you can stand."

Quillan helped the big man to his feet. Baldy hadn't bled too much outwardly, but he seemed to have estimated his own condition correctly. He wasn't for long. Quillan slid an arm under his shoulders.

"Where's a ComWeb?" he asked.

Baldy blinked about. "Passage there—" His voice was beginning to thicken.

The ComWeb was in the second room up the passage. Quillan eased Perk into the seat before it. Baldy's head lolled heavily forward, like a drunken man's "What's the number?" Quillan asked.

Baldy reflected a few seconds, blinking owlishly at the instrument, then told him. Quillan tapped out the number, flicked on the vision screen, then stood aside and back, beyond the screen's range.

"Yeah, Perk?" a voice said some seconds later. "Hey, *Perk* . . . Perk, what's with ya?"

Baldy spat blood, grinned. "Shot —" he said.

"*What?*"

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"Yeah." Baldy scowled, blinking. "Now, lessee—Oh, yeah. Star gang's gonna jump ya! Watch it!"

"What?"

"Yeah, watch—" Baldy coughed, laid his big head slowly down face forward on the ComWeb stand, and stopping moving.

"Perk! Man, wake up! Perk!"

Quillan quietly took out the gun, reached behind the stand and blew the ComWeb apart. He wasn't certain what the freighter's crew would make of the sudden break in the connection, but they could hardly regard it as reassuring. He made a brief prowl then through the main sections of the level. Evidence everywhere of a short and furious struggle, a struggle between men panicked and enraged almost beyond any regard for self-preservation. It must have been over in minutes. He found that the big hall portal to the ground level had been sealed, whether before or after the shooting he couldn't know. There would have been around twenty members of the Brotherhood on the level. None of them had lived as long as Baldy Park, but they seemed to have accounted for approximately an equal number of the Star's security force first.

Five Star men came piling out of the fifth level portal behind him a minute or two later, Ryter in the lead, Orca behind Ryter. All five held leveled guns.

"You won't need the hardware," Quillan assured them. "It's harmless enough now. Come on in."

They followed him silently up to the cubicle, stared comprehendingly at dials and indicators. "The thing's back inside there, all right!" Ryter said. He looked at Quillan. "Is this where you've been all the time?"

"Sure. Where else?" The others were forming a half-circle about him, a few paces back.

"Taking quite a chance with that Hlat, weren't you?" Ryter remarked.

"Not too much. I thought of something." Quillan indicated the outportal in the hall. "I had my back against that. A portal's space-break, not solid matter. It couldn't come at me from behind. And if it attacked from any other angle"—he tapped the holstered Miam Devil lightly, and the gun in Orca's hand jerked upward a fraction of an inch— "There aren't many animals that can swallow more than a bolt or two from that baby and keep coming."

There was a moment's silence. Then Orca said thoughtfully, "That would work!"

"Did it see you?" Ryter asked.

"It couldn't have. First *I* saw of it, it was sailing out from that corner over there. It slammed in after that chunk of sea beef so fast, it shook the cubicle. And that was that." He grinned. "Well, most of our troubles should be over now!"

One of the men gave a brief, nervous laugh. Quillan looked at him curiously. "Something, chum?"

Ryter shook his head. "Something is right! Come on downstairs again, Bad News. This time we have news for you—"

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The Brotherhood guards on the ground level had been taken by surprise and shot down almost without losses for the Star men. But the battle on the fourth level had cost more than the dead left up there. An additional number had returned with injuries that were serious enough to make them useless for further work.

"It's been expensive," Ryter admitted. "But one more attack by the Hlat would have left me with a panicked mob on my hands. If we'd realized it was going to trap itself—"

"I wasn't so sure that would work either," Quillan said. "Did you get Kinmarten back?"

"Not yet. The chances are he's locked up somewhere on the fourth level. Now the Hlat's out of the way, some of the men have gone back up there to look for him. If Cooms thought he was important enough to start a fight over, I want him back."

"How about the crew on the Beldon ship?" Quillan asked. "Have they been cleaned up?"

"No," Ryter said. "We'll have to do that now, of course."

"How many of them?"

"Supposedly twelve. And that's probably what it is."

"If they know or suspect what's happened," Quillan said, "twelve men can give a boarding party in a lock a remarkable amount of trouble."

Ryter shrugged irritably. "I know, but there isn't much choice. Lancion's bringing in the other group on the *Camelot*. We don't want to have to handle both of them at the same time."

"How are you planning to take the freighter?"

"When the search party comes back down, we'll put every man we can spare from guard duty here on the job. They'll be instructed to be careful about it . . . if they can wind up the matter within the next several hours, that will be early enough. We can't afford too many additional losses now. But we should come out with enough men to take care of Lancion and handle the shipment of Hlats. And that's what counts."

"Like me to take charge of the boarding party?" Quillan inquired. "That sort of thing's been a kind of specialty of mine."

Ryter looked at him without much expression on his face. "I understand that," he said. "But perhaps it would be better if you stayed up here with us."

The search party came back down ten minutes later. They'd looked through every corner of the fourth level. Kinmarten wasn't there, either dead or alive. But one observant member of the goup had discovered, first, that the Duke of Fluel was also not among those present, and, next, that one of the four outportals on the level had been unsealed. The exit on which the portal was found to be set was in a currently unused hall in the General Offices building on the other side of the Star. From that hall, almost every other section of the Star was within convenient portal range.

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None of the forty-odd people working in the main control office on the ground level had actually witnessed any shooting; but it was apparent that a number of them were uncomfortably aware that something quite extraordinary must be going on. They were a well-disciplined group, however. An occasional uneasy glance toward one of the armed men lounging along the walls, some anxious faces, were the only noticeable indications of tension. Now and then, there was a brief, low-pitched conversation at one of the desks.

Quillan stood near the center of the office, Ryter and Orca a dozen feet from him on either side. Four Star guards were stationed along the walls. From the office one could see through a large doorspace cut through both sides of a hall directly into the adjoining transmitter room. Four more guards were in there. Aside from the men in the entrance hall and at the subspace portal, what was available at the moment of Ryter's security force was concentrated at this point.

The arrangement made considerable sense; and Quillan gave no sign of being aware that the eyes of the guards shifted to him a little more frequently than to any other point in the office, or that none of them had moved his hand very far away from his gun since they had come in here. But that also made sense. In the general tension area of the Executive Block's ground level, a specific point of tension—highly charged though undetected by the noninvolved personnel—was the one provided by the presence of Bad News Quillan here. Ryter was more than suspicious by now; the opened portal on the fourth level, the disappearance of Kinmarten and the Duke, left room for a wide variety of speculations. Few of those speculations could be very favorable to Bad News. Ryter obviously preferred to let things stand as they were until the Belden freighter was taken and the major part of his group had returned from the subspace sections of the Star. At that time, Bad News could expect to come in for some very direct questioning by the security chief.

The minutes dragged on. Under the circumstances, a glance at his watch could be enough to bring Ryter's uncertainties up to the explosion point, and Quillan also preferred to let things stand as they were for the moment. But he felt reasonably certain that over an hour had passed since he'd left Reetal; and so far there had been no hint of anything unusual occurring in the front part of the building. The murmur of voices in the main control office continued to eddy about him. There were indications that in the transmitter room across the hall messages had begun to be exchanged between the Star and the approaching liner.

A man sitting at a desk near Quillan stood up presently, went out into the hall and disappeared. A short while later, the white-suited figure returned and picked up the interrupted work. Quillan's glance went over the clerk, shifted on. He felt

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something tighten up swiftly inside him. There was a considerable overall resemblance, but *that* wasn't the man who had left the office.

Another minute or two went by. Then two other uniformed figures appeared at the opening to the hall, a sparse elderly man, a blond girl. They stood there talking earnestly together for some seconds, then came slowly down the aisle toward Quillan. It appeared to be an argument about some detail of her work. The girl frowned, stubbornly shaking her head. Near Quillan they separated, started off into different sections of the office. The girl, glancing back, still frowning, brushed against Ryter. She looked up at him, startled.

"I'm sorry," she said.

Ryter scowled irritably, started to say something, suddenly appeared surprised. Then his eyes went blank and his knees buckled under him.

The clerk sitting at the nearby desk whistled shrilly.

Quillan wheeled, gun out and up, toward the wall behind him. The two guards there were still lifting their guns. The Miam Devil grunted disapprovingly twice, and the guards went down. Noise crashed from the hall . . . heavy sporting rifles. He turned again, saw the two other guards stumbling backward along the far wall. Feminine screaming erupted around the office as the staff dove out of sight behind desks, instrument stands and filing cabinets. The elderly man stood above Orca, a sap in his hand and a pleased smile on his face.

In the hallway, four white-uniformed men had swung about and were pointing blazing rifles into the transmitter room. The racketing of the gunfire ended abruptly and the rifles were lowered again. The human din in the office began to diminish, turned suddenly into a shocked, strained silence. Quillan realized the blond girl was standing at his elbow.

"Did you get the rest of them?" he asked quickly, in a low voice.

"Everyone who was on this level," Reetal told him. "There weren't many of them."

"I know. But there's a sizable batch still in the subspace section. If we can get the bomb disarmed, we'll just leave them sealed up there. How long before you can bring Ryter around?"

"He'll be able to talk in five minutes."

Quillan had been sitting for some little while in a very comfortable chair in what had been the commodore's personal suite on the Seventh Star, broodingly regarding the image of the *Camelot* in a huge wall screen. The liner was still over two hours' flight away but would arrive on schedule. On the Star, at least in the normspace section, everything was quiet; and in the main control offices and in the transmitter room normal working conditions had been restored.

A room portal twenty feet away opened suddenly, and Reetal Destone stepped out.

"So there you are!" she observed.

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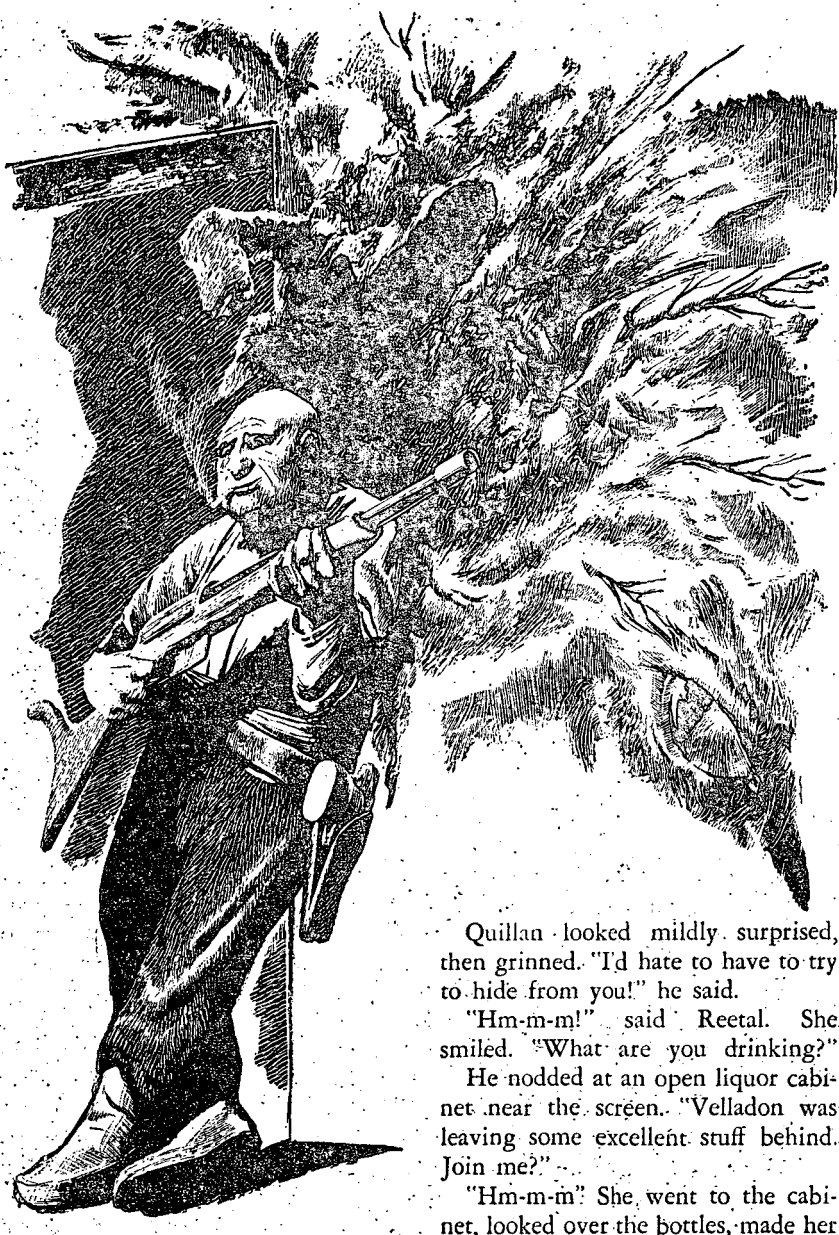

Quillan looked mildly surprised, then grinned. "I'd hate to have to try to hide from you!" he said.

"Hm-m-m!" said Reetal. She smiled. "What are you drinking?"

He nodded at an open liquor cabinet near the screen. "Velladon was leaving some excellent stuff behind. Join me?"

"Hm-m-m." She went to the cabinet, looked over the bottles, made her

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selection and filled a glass. "One has the impression," she remarked, "that you *were* hiding from me."

"One does? I'd have to be losing my cotton-picking mind—"

"Not necessarily." Reetal brought the drink over to his chair, sat down on the armrest with it. "You might just have a rather embarrassing problem to get worked out before you give little Reetal a chance to start asking questions about it."

Quillan looked surprised. "What gave you that notion?"

"Oh," Reetal said, "adding things up gave me that motion . . . Care to hear what the things were?"

"Go ahead, doll."

"First," said Reetal, "I understand that a while ago, after you'd first sent me off to do some little job for you, you were in the transmitter room having a highly private—shielded and scrambled—conversation with somebody on board the *Camelot*."

"Why, yes," Quillan said. "I was talking to the ship's security office. They're arranging to have a Federation police boat pick up what's left of the commodore's boys and the Brotherhood in the subspace section."

"And that," said Reetal, "is where that embarrassing little problem begins. Next, I noticed, as I say, that you were showing this tendency to avoid a chance for a private talk between us. And after thinking about that for a little, and also about a few other things which came to mind at around that time, I went to see Ryter."

"Now why—?"

Reetal ran her fingers soothingly through his hair. "Let me finish, big boy. I found Ryter and Orca in a highly nervous condition. And do you know why they're nervous? They're convinced that some time before the *Camelot* gets here, you're going to do them both in."

"Hm-m-m," said Quillan.

"Ryter," she went on, "besides being nervous, is also very bitter. In retrospect, he says, it's all very plain what you've done here. You and your associates—a couple of tough boys named Hagready and Boltan, and others not identified—are also after these Hlats. The Duke made some mention of that, too, you remember. The commodore and Ryter bought the story you told them because a transmitter check produced the information that Hagready and Boltan had, in fact, left their usual work areas and gone off on some highly secret business about a month ago.

"Ryter feels that your proposition—to let your gang in on the deal for twenty per cent, or else—was made in something less than good faith. He's concluded that when you learned of the operation being planned by Velladon and the Brotherhood, you and your pals decided to obstruct them and take the Hlats for delivery to Yaco yourselves, without cutting anybody in. He figures that someone like Hagready or Boltan is coming in on the *Camelot* with a flock of sturdy henchmen to do just that. You, personally, rushed to the Seventh Star to interfere as much as you

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could here. Ryter admits reluctantly that you did an extremely good job of interfering. He says it's now obvious that every move you made since you showed up had the one purpose of setting the Star group and the Brotherhood at each other's throats. And now that they've practically wiped each other out, you and your associates can go on happily with your original plans.

"But, of course, you can't do that if Ryter and Orca are picked up alive by the Federation cops. The boys down in the subspace section don't matter; they're ordinary gunhands and all they know is that you were somebody who showed up on the scene. But Ryter could, and certainly would, talk—"

"Ah, he's too imaginative," Quillan said, taking a swallow of his drink. "I never heard of the Hlats before I got here. As I told you, I'm on an entirely different kind of job at the moment. I had to make up some kind of story to get an in with the boys, that's all."

"So you're not going to knock those two weasels off?"

"No such intentions. I don't mind them sweating about it till the Feds arrive, but that's it."

"What about Boltan and Hagready?"

"What about them? I did happen to know that if anyone started asking questions about those two, he'd learn that neither had been near his regular beat for close to a month."

"I'll bet!" Reetal said cryptically.

"What do you mean by that?"

"Hm-m-m," she said. "Bad News Quillan! A really tough boy, for sure. You know, I didn't believe for an instant that you were after the Hlats—"

"Why not?"

Reetal said, "I've been on a couple of operations with you, and you'd be surprised how much I've picked up about you from time to time on the side. Swiping a shipment of odd animals and selling them to Yaco, that could be Bad News, in character. Selling a couple of hundred human beings—like Brock and Solvey Kinmarten—to go along with the animals to an outfit like Yaco would not be in character."

"So I have a heart of gold," Quillan said.

"So you fell all over your own big feet about half a minute ago!" Reetal told him. "Bad News Quillan—with no interest whatsoever in the Hlats—still couldn't afford to let Ryter live to talk about him to the Feds, big boy!"

Quillan looked reflective for a moment. "Dirty trick!" he observed. "For that, you might freshen up my glass."

Reetal took both glasses over to the liquor cabinet, freshened them up, and settled down on the armrest of the chair again. "So there we're back to the embarrassing little problem," she said.

"Ryter?"

"No, idiot. We both know that Ryter is headed for Rehabilitation. Fifteen years or so of it, at a guess. The problem is little Reetal who has now

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learned a good deal more than she was ever intended to learn. Does she head for Rehabilitation, too?"

Quillan took a swallow of his drink and set the glass down again. "Are you suggesting," he inquired, "that I might be, excuse the expression, a cop?"

Reetal patted his head. "Bad News Quillan! Let's look back at his record. What do we find? A shambles, mainly. Smashed-up organizations, outfits, gangs. Top-level crooks with suddenly vacant expressions and unexplained holes in their heads. Why go on? The name is awfully well earned! And nobody realizing anything because the ones who do realize it suddenly . . . well, where *are* Boltan and Hagready at the moment.,"

Quillan sighed. "Since you keep bringing it up—Hagready played it smart, so he's in Rehabilitation. Be cute if Ryter ran into him there some day. Pappy Boltan didn't want to play it smart. I'm not enough of a philosopher to make a guess at where he might be at present. But I knew he wouldn't be talking."

"All right," Reetal said, "we've got that straight. Bad News is Intelligence of some kind. Federation maybe, or maybe one of the services. It doesn't matter, really, I suppose. Now, what about me?"

He reached out and tapped his glass with a fingertip. "That about you, doll. You filled it. I'm drinking it. I may not think quite as fast as you do, but I still think. Would I take a drink from a somewhat lawless and very clever lady who really believed I had her lined up for Rehabilitation? Or who'd be at all likely to blab out something that would ruin an old pal's reputation?"

Reetal ran her fingers through his hair again. "I noticed the deal with the drink," she said. "I guess I just wanted to hear you say it. You don't tell on me, I don't tell on you. Is that it?"

"That's it," Quillan said. "What Ryter and Orca want to tell the Feds doesn't matter. It stops there; the Feds will have the word on me before they arrive. By the way, did you go wake up the Kinmartens yet?"

"Not yet," Reetal said. "Too busy getting the office help soothed down and back to work."

"Well, let's finish these drinks and go do that, then. The little doll's almost bound to be asleep by now, but she might still be sitting there biting nervously at her pretty knuckles."

Major Heslet Quillan, of Space Scout Intelligence, was looking unhappy. "We're still searching for them everywhere," he explained to Klayung, "but it's a virtual certainty that the Hlat got them shortly before it was trapped."

Klayung, a stringy, white-haired old gentleman, was an operator of the Psychology Service, in charge of the shipment of Hlats the *Camelot* had brought in. He and Quillan were waiting in the vestibule of the Seventh Star's rest cubicle vaults for Lady Pendrake's cubicle to be brought over from the Executive Block.

Klayung said reflectively, "Could-

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n't the criminals with whom you were dealing here have hidden the couple away somewhere?"

Quillan shook his head. "There's no way they could have located them so quickly. I made half a dozen portal switches when I was taking Kinmarten to the suite. It would take something with a Hlat's abilities to follow me over that route and stay undetected. And it must be an unusually cunning animal to decide to stay out of sight until I'd led it where it wanted to go."

"Oh, they're intelligent enough," Klayung agreed absently. "Their average basic I.Q. is probably higher than that of human beings. A somewhat different type of mentality, of course. Well, when the cubicle arrives, I'll question the Hlat and we'll find out."

Quillan looked at him. "Those control devices make it possible to hold two-way conversations with the things?"

"Not exactly," Klayung said. "You see, major, the government authorities who were concerned with the discovery of the Hlats realized it would be almost impossible to keep some information about them from getting out. The specimen which was here on the Star has been stationed at various scientific institutions for the past year; a rather large number of people were involved in investigating it and experimenting with it. In consequence, several little legends about them have been deliberately built up. The legends aren't entirely truthful, so they help to keep the actual facts about the Hlats satisfactorily vague.

"The Hlat-talker is such a legend. Actually, the device does nothing. The Hlats respond to telepathic stimuli, both among themselves and from other beings, eventually begin to correlate such stimuli with the meanings of human speech."

"Then you—" Quillan began.

"Yes. Eltak, their discoverer, was a fairly good natural telepath. If he hadn't been abysmally lazy, he might have been very good at it. I carry a variety of the Service's psionic knickknacks about with me, which gets me somewhat comparable results."

He broke off as the vestibule portal dilated widely. Lady Pendrake's cubicle floated through, directed by two gravity crane operators behind it. Klayung stood up.

"Set it there for the present, please," he directed the operators. "We may call for you later if it needs to be moved again."

He waited until the portal had closed behind the men before walking over to the cubicle. He examined the settings and readings at some length.

"Hm-m-m, yes," he said, straightening finally. His expression became absent for a few seconds; then he went on. "I'm beginning to grasp the situation, I believe. Let me tell you a few things about the Hlats, major. For one, they form quite pronounced likes and dislikes. Eltak, for example, would have been described by most of his fellow men as a rather offensive person. But the Hlats ac-

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tually became rather fond of him during the fifteen or so years he lived on their island.

"That's one point. The other has to do with their level of intelligence. We discovered on the way out here that our charges had gained quite as comprehensive an understanding of the functioning of the cubicles that had been constructed for them as any human who was not a technical specialist might do. And—"

He interrupted himself, stood rubbing his chin for a moment.

"Well, actually," he said, "that should be enough to prepare you for a look inside the Hlat's cubicle."

Quillan gave him a somewhat surprised glance. "I've been told it's ugly as sin," he remarked. "But I've seen some fairly revolting looking monsters before this."

Klayung coughed. "That's not exactly what I meant," he said. "I . . . well, let's just open the thing up. Would you mind, major?"

"Not at all." Quillan stepped over to the side of the cubicle, unlocked the door switch and pulled it over. They both moved back a few feet before the front of the cubicle. A soft humming came for some seconds from the door's mechanisms; then it suddenly swung open. Quillan stooped to glance inside, straightened instantly again, hair bristling.

"Where is it?" he demanded, the Miam Devil out in his hand.

Klayung looked at him thoughtfully. "Not very far away, I believe. But I can assure you, major, that it hasn't the slightest intention of attacking us—or anybody else—at present."

Quillan grunted, looked back into the cubicle. At the far end, the Kinmartens lay side by side, their faces composed. They appeared to be breathing regularly.

"Yes," Klayung said, "they're alive and unharmed." He rubbed his chin again. "And I think it would be best if we simply closed the cubicle now. Later we can call a doctor over from the hospital to put them under sedation before they're taken out. They've both had thoroughly unnerving experiences, and it would be advisable to awaken them gradually to avoid emotional shock."

He moved over to the side of the cubicle, turned the door switch back again. "And now for the rest of it," he said. "We may as well sit down again, major. This may take a little time.

"Let's look at the thing for a moment from the viewpoint of the Hlat," he resumed when he was once more comfortably seated. "Eltak's death took it by surprise. It hadn't at that point grasped what the situation in the Executive Block was like. It took itself out of sight for the moment, killing one of the gang leaders in the process, then began prowling about the various levels of the building, picking up information from the minds and conversation of the men it encountered. In a fairly short time, it learned enough to understand what was planned by the criminals; and it arrived at precisely your own conclusion . . . that it might be possi-

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ble to reduce and demoralize the gangs to the extent that they would no longer be able to carry out their plan. It began a systematic series of attacks on them with that end in mind.

"But meanwhile you had come into the picture. The Hlat was rather puzzled by your motive at first because there appeared to be an extraordinary degree of discrepancy between what you were saying and what you were thinking. But after observing your activities for a while, it began to comprehend what you were trying to do. It realized that your approach was more likely to succeed than its own, and that further action on its side might interfere with your plans. But there remained one thing for it to do.

"I may tell you in confidence, major, that another legend which has been spread about these Hlats is their supposed inability to escape from the cubicles. Even their attendants are supplied with this particular bit of misinformation. Actually, the various force fields in the cubicles don't hamper them in the least. The cubicles are designed simply to protect the Hlats and keep them from being seen; and rest cubicles, of course, can be taken anywhere without arousing undue curiosity.

"You mentioned that the Kinmartens are very likable young people. The Hlat had the same feeling about them; they were the only human beings aside from Eltak with whose minds it had become quite familiar. There was no assurance at this point that the plans to prevent a bomb from being exploded in the Star would be successful, and the one place where human beings could hope to survive such an explosion was precisely the interior of the Hlat's cubicle, which had been constructed to safeguard its occupant against any kind of foreseeable accident.

"So the Hlat sprang your cubicle trap, removed the bait, carried the Kinmartens inside, and whipped out of the cubicle again before the rest current could take effect on it. It concluded correctly that everyone would decide it had been recaptured. After that, it moved about the Executive Block, observing events there and prepared to take action again if that appeared to be advisable. When you had concluded your operation successfully, it remained near the cubicle, waiting for me to arrive."

Quillan shook his head. "That's quite an animal!" he observed after some seconds. "You say it's in our general vicinity now?"

"Yes," Klayung said. "It followed the cubicle down here, and has been drifting about the walls of the vestibule while we . . . well, while I talked."

"Why doesn't it show itself?"

Klayung cleared his throat. "For two reasons," he said. "One is that rather large gun you're holding on your knees. It saw you use it several times, and after all the shooting in the Executive Block, you see—"

Quillan slid the Miam Devil into its holster. "Sorry," he said. "Force of habit, I guess. Actually, of course,

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I've understood for some minutes now that I wasn't . . . well, what's the other reason?"

"I'm afraid," Klayung said, "that you offended it with your remark about its appearance. Hlats may have their share of vanity. At any rate, it seems to be sulking."

"Oh," said Quillan. "Well, I'm sure," he went on rather loudly, "that it understands I received the description from a prejudiced source. I'm quite willing to believe it was highly inaccurate."

"Hm-m-m," said Klayung. "That seems to have done it, major. The wall directly across from us—"

Something like a ripple passed along the side wall of the vestibule. Then the wall darkened suddenly, turned black. Quillan blinked, and the Hlat came into view. It hung, spread out like a spider, along half the length of the vestibule wall. Something like a huge, hairy amoeba in overall appearance, though the physical structures under the coarse, black pelt must be of very unamoeba-like complexity. No eyes were in sight, but Quillan had the impression of being regarded steadily. Here and there, along the edges and over the surface of the body, were a variety of flexible extensions.

Quillan stood up, hitched his gun belt into position, and started over toward the wall.

"Lady Pendrake," he said, "honored to meet you. Could we shake hands?"

THE END

IN TIMES TO COME

The faithful Moslem proclaims "There is no God but Allah, and Mohammed is his prophet!" For a couple of centuries now, the faithful cosmologist has, in effect, been proclaiming "There is no God but Gravity, and Newton is his prophet!"

More recently, however, they've begun to realize that there are immense, and immensely important forces at work in stellar dynamics that are neither gravitational, nor nuclear. Why should two colliding galaxies pull apart like two sticky lumps of taffy? How can a galaxy—made up of gravitating stars—act *viscous?*

There are a lot of other things we've been finding recently—van Allen belts—solar corona phenomena—and, most startling of all, solar flares so unimaginably violent that, in a period of a fraction of a minute, more energy is released by one tiny area of the Sun's surface than the *total* thermal energy of the entire Solar chromosphere!

Next month, Hal Clement has a fact article that's more incredible than many of the fiction stories he's famous for. "Gravity Insufficient" discusses the new findings coming out of space exploration both by space probes and radio astronomy.

The Editor.

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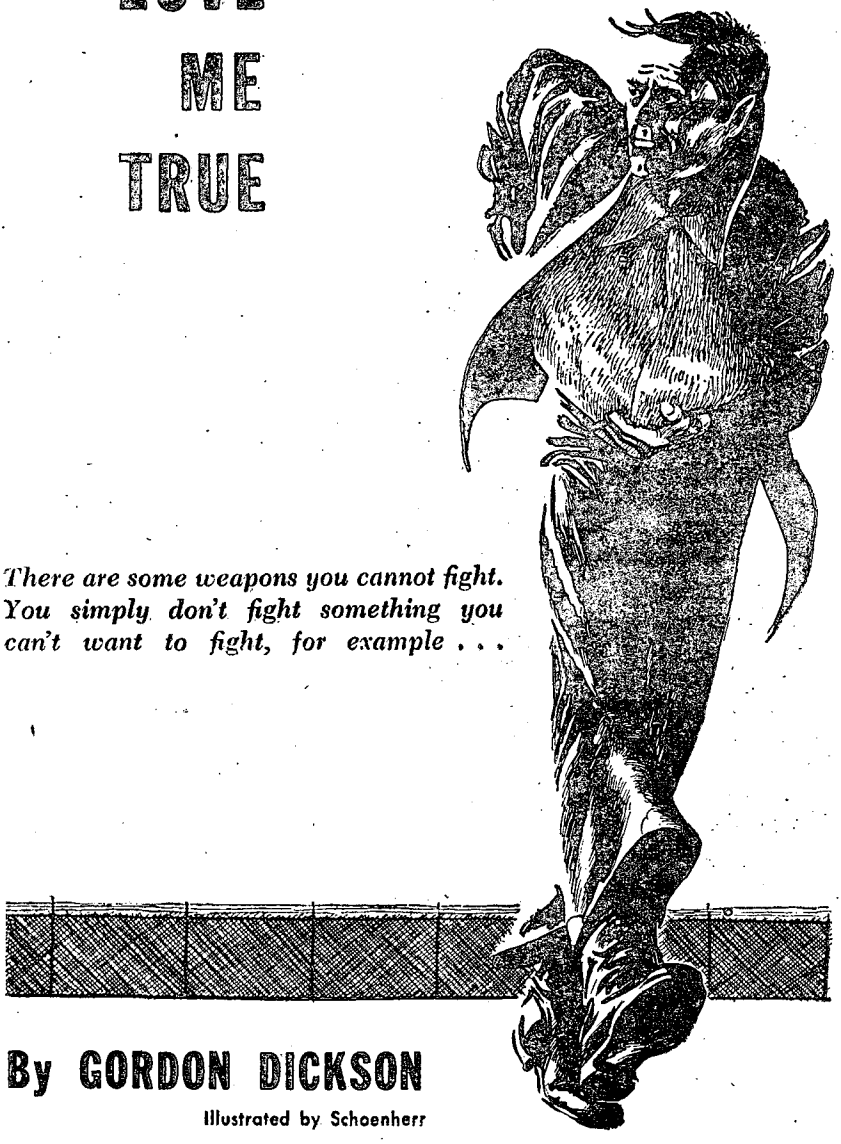

There are some weapons you cannot fight. You simply don't fight something you can't want to fight, for example . . .

By GORDON DICKSON

Illustrated by Schoenherr

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N THE way to the Colonel's office, Ted Holman asked the MP to take him around by the laboratories so he could get a look at Pogey.

"You think I'm nuts?" said the MP. "I can't do that. Anyway we haven't got time. And anyway, they wouldn't let you in there. All we could do is look in through the door."

"All right. I can see him through the door, anyway," said Ted. The MP hesitated. He was a lean, dark young kid from Colorado; and he looked older than Ted, who was a tow-headed, open-faced young blond soldier of the type who never looks quite grown up. But Ted had been to Arcturus IV and back; while the MP had never been farther than Washington, D.C.

So they went to the laboratories; and the MP stood to one side while Ted peered through the wire and glass of the small window set high in the door to the experimental section. Inside were cages with white rats, and rabbits, some rhesus monkeys and a small, white-haired, terrier-looking bitch. The speaker grill above the door brought to Ted's ears the rustling sound of the creatures in their cages.

"I can't see him," said Ted.

"In the corner," said the MP.

Ted pressed closer to the door and caught sight of a cage in the corner containing what looked like some woman's silver fox fur neckpiece, including the black button nose and the bead-eyes. It was all curled up.

"Pogey!" said Ted. *"Pogey!"*

"He can't hear you," said the MP. "That speaker's one way, so the night guards can check, in the labs."

A white-coated man came into the room from a far door, carrying a white enamel tray with fluffy cotton and three hypodermic syringes lying in it. The little bitch and Pogey were instantly alert and pressing their nose to the bars of their cages. The bitch wagged her stub tail and whined.

"Love me?" said Pogey. "Love me?"

The white-coated man paid no attention. He left his tray and went out again. The bitch whined after him. Pogey drooped. Ted's hands curled into fists against the slick metal face of the door.

"He could've said something!" said Ted. "He could've spoke!"

"He was busy," said the MP nervously. "Come on—we got to get going."

They went on over to the Colonel's office. When they came to the door of the outer office, the MP slid his gun around on his belt so it was out of sight under his jacket. Then they went in. A small girl with startlingly beautiful green eyes in a blue summer-weight suit, a civilian, was seated on one of the hard wooden benches outside the wooden railing, waiting. She looked closely at Ted as he and the MP came through the railing.

"He's waiting for you. Go on in," said the lieutenant behind the railing. They passed on, through a brown

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door and closed it behind them, into a rectangular office with a good-looking dark wood desk, a carpet and a couple of leather chairs this side of the desk.

"You can wait outside, Corporal," said the Colonel, from behind the desk. The MP went out again, leaving Ted standing stiff and facing the desk. "You fool, Ted!" said the Colonel.

"He's mine," said Ted.

"You just get that notion out of your head," said the Colonel. "Get it out right now." He was a dark little man with a nervous mustache.

"I want him back."

"You're getting nothing back. It's tough enough as it is. All right, we all went to Arcturus together, and we're the first outfit to do something like that and so we're not going to let one of our own boys get slapped by regulations when we can handle it among ourselves. But you just get it straight you aren't getting that antipod back."

Ted said nothing.

"You listen to me good now," said the Colonel. "Do you know what they can do to your for striking a commissioned officer? Instead of getting out, today, you could be starting fifteen years hard labor. Plus what you'd get for smuggling the antipod back."

Ted still said nothing.

"Well, you're lucky," said the Colonel. "You're just plain lucky. The whole outfit went to bat for you. We got the necessary papers faked up to make the antipod an experimental animal the outfit brought back—not you, the outfit. And Curry—*Lieutenant* Curwen, Ted, you might remember—is going to pretend you didn't try to half-kill him when he came to take the antipod away from you. *I* was going to make you go over and apologize to him; but he said no, he didn't blame you. You're just lucky."

He stopped and looked at Ted.

"Well?" he said.

"You don't understand," said Ted. "They die if they don't have somebody to love them. I was at that weather observation point all by myself for six months. I know. Pogey'll die."

"Look . . . oh, go out and get drunk, or something!" exploded the Colonel. "I tell you we've done the best we can. Everybody's done the best they can; and you're lucky to be walking out of here with a clean record." He picked up the phone on his desk and began punching out a number. "Get out."

Ted went out. Nobody stopped him. He went back to the temporary barracks the expedition had been assigned to, changed into civilian clothes and left the base. He was in about his fifth bar that evening when a woman sat down on the stool next to him.

"Hi there, Ted," she said.

He turned around and looked at her. Her eyes were as green as a well-watered lawn at sunset, her hair was somewhere between brunet and blond and she wore a tailored blue suit. Then he recognized her as the

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girl in the Colonel's outer office. With her face only a foot or so away she looked older than she had in the office; and she saw he saw this, for she leaned back a little from him.

"I'm June Malyneux," she said, "from *The Recorder.* I'm a newspaperwoman." Ted considered this, looking at her.

"You want a drink, or something?" he said.

"That'd be wonderful," she said. "I'd like a Tom Collins."

He bought her a Tom Collins; and they sat there side by side in the dim bar looking at each other and drinking.

"Well," she said, "what did you miss most when you were twenty-three and a half quadrillion miles from home?"

"Grass," said Ted. "That is, at first. After a while I got used to the sand and the creepers. And I didn't miss it so much any more."

"Did you miss getting drunk?"

"No," said Ted.

"Then why are you doing it?"

He stopped drinking to look at her.

"I just feel like it, that's all," he said. She reached out and laid a hand on his arm.

"Don't be mad," she said. "I know about it. It's pretty hard to keep secrets from newspaper people. What are you going to do about it?"

He pulled his arm out from under her hand and had another swallow from his glass.

"I don't know," he said. "I don't know what to do."

"How'd you happen to get the . . . the—"

"Antipod. When they hunch their back to walk it looks like the front pair of legs're working against the back pair."

"Antipod. How'd you make a pet of it in the first place?"

"I was alone at this weather observation point for a long time." Ted was turning his glass around and around, and watching the rim revolve like a hoop of light. "After a while Pogey took to me."

"Did any of the other men make pets out of them?"

"Nobody I know of. They'll come up to you; but they're real shy. They scare off easy. Then after that they won't have anything to do with you."

"Did you scare any off?" June said.

"I must have," he shrugged, "—at first. I didn't pay any attention to them for a long time. Then I began to notice how they'd sit and watch me and my shack and the equipment. Finally Pogey got to know me."

"How did you do it?" she asked.

He shrugged again.

"Just patient, I guess," he said.

The bar was filling up around them. A band had started up in the supper club attached, and it was getting noisy.

"Come on," June said. "I know a quieter place where we can hear ourselves talk." She got up; and he got up and followed her out.

They took a taxi and went down to a place on the beach called Digger's Inn. It had a back porch overlooking

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the surf which was washing upon the sand, some fifteen feet below. The porch had a thatched roof; and the small round tables on it were lit by candles and the moonlight coming in across the waves. They had switched to rum drinks and Ted was getting quite drunk. It annoyed him; because he was trying to tell June what it had been like and his thickened tongue made talking clumsy.

". . . The farther away you get," he was saying. "I mean—the farther you go, the smaller you get. You understand?" She sat, waiting for him to tell her. "I mean . . . suppose you were born and grew up and never went more than a block from home. You'd be real big. You know what I mean? Put you and that block side by side, like on a table, and both of you'd show." He drew a circle and a dot with his forefinger on the dampness of the table between them to illustrate. "But suppose you traveled all over the city, then you'd look *this* big, side by side with it. Or the world, or the solar system—"

"Yes," she said.

". . . But you go some place like Alpha Centauri, you go twenty-three quadrillion, four hundred trillion miles from home, and"—he held up thumb and forefinger nails pinched together—"you're all alone out there for months, what's left of you then?" He shook the thumb and forefinger before her eyes. "You're that small. You're nothing."

She glanced from his pinched fingers to his face without moving anything but her eyes. His elbow was on the table, his thumb and forefinger inches before her face. She reached up and put her own hand gently over his fingers.

"No, listen—" he insisted shaking his hand loose. "What's left when you're that small? What's left?"

"You are," she said.

He shook his head, hard.

"No!" he said. "I'm not. Only what I can do? But what can I do when I'm that high?" He closed his hand earnestly around her arm. "I'm little and I do little things. Everything I do is too little to count—"

"Please," she was softly prying at his fingers with her other hand, "you're hurting—"

". . . I can love," he said. "I can give my love."

Her fingers stilled. They stopped trying to loosen his. She looked up at him and he looked drunkenly down at her. Her eyes searched his face almost desperately.

"How old are you?" she whispered.

"Twenty-five," he said.

"You don't look that old. You look—younger than I am," she said.

"Doesn't matter how old I am," said Ted. "It just matters what I can do."

"Please," she said. "You're squeezing too hard. My arm—"

He let go of her.

"Sorry," he said. He went back to his drinking.

"No, tell me," she said. Her right hand massaged the arm he had squeezed. "How did you get him out?"

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"Pogey?" he said. "We practiced. I wrapped him around my waist, under my shirt and jacket."

"And he didn't show? And you got him on the ship that way when you came back."

"They weighed us on," said Ted, dully. "But I'd thought of that. I'd taken off twelve pounds. And exercised so I wouldn't look gaunted down. Pogey weighs just about eleven."

"And they didn't know it until you got here?"

"Sneak inspection. To beat the government teams to it, so nobody'd be embarrassed. Colonel ordered it; but Curry pulled it—Lieutenant Curwen—and he found him, and—" Ted ran down staring at his glass.

"What would you have done?" June said. "With—Pogey, I mean?"

He looked over at her, surprised. "I would have kept him. With me. I would have taken care of him." He looked at her. "Don't you understand? Pogey *needs* me."

"I understand," she said. "I do." She moved a little toward him, so that her shoulder rubbed against the sleeve of his arm. "I'll help you get him out."

"You?" He said.

"Oh, yes!" she said, quickly. "Yes, I can!"

"How?" he said. And then—"Why? We've been talking here all this time, and now all of a sudden you want to help Pogey and me. Why? It isn't that newspaper of yours—"

"No, *no!*" she said. "I didn't really care at first, that was it. I mean it was a good story, that was all. Just that. And then, something about the way you talk about him . . . I don't know. But I changed sides, all of a sudden. Ted, you believe me, don't you?"

"I don't know," he said thickly.

"Ted," she said. "Ted." She moved close to him, her head was tilted back, her eyes half-closed. He stared stupidly down at her for a moment; then, clumsily, he put his arms around her and bent his own head and kissed her. He felt her tremble in his arms.

He let her go at last. She drew back a little from him and wiped the corners of her eyes, with her forefinger.

"Now," she said shakily, "do you believe me?"

"Yes," he said. He watched her for a second as she got out handkerchief, lipstick and compact. "But how're we going to do it? They've got him."

"There're ways," she said, sliding the lipstick around her upper lip carefully. She rolled her upper lip against the lower, and blinked a little, examining the result in the mirror. "I'm quite good, you know," she said to the compact. "I can manage all sorts of things. And I . . . I want to manage this for you."

"How?" he said.

"You have to know what's going on." She folded the compact and put it away with a sharp snap. "That expedition of yours to Alpha Centauri cost forty billion dollars."

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"I know," he said. "But what's that got to do—"

"The military's sold on the idea of further stellar exploration and expansion. They want a program of three more expeditions of increasing size; one that would cost a hundred and fifty billion during the next twenty years." She glanced at him the way a schoolteacher might. "That's a lot of money. But now's the ideal time to ask for it. All of you have just got back. Popular interest is high . . . so on."

"Sure," he said. "But what's that got to do with Pogey?"

"They don't want a fuss. No scandal. Nothing that'll start an argument at this stage in the game. Now tell me," she turned to face him, "you're released from service now, aren't you?"

"Yes." Ted nodded, frowning at her, "they signed me out today before they took me to see the colonel. I'm a civilian."

"All right. Fine," she said. "And you know where Pogey is. Can you go get him and get him outside the base?"

"Yeah," he said. "Yeah, I thought of that. But I was saving it for last—if I couldn't think of a better way where they couldn't come after us."

"They won't. You leave that part of it to me. Pogey was your pet; and his kind was listed harmless by the expedition when they were on Alpha Centauri. There's enough of a case there to make good weepy newspaper copy. I'll have a little talk with your colonel and some others."

"But what good'll that do if they just take him back anyway?"

"They won't. Legally, they're got you, Ted. But they'll let you get away with it rather than risk the publicity. Wait and see."

"You think so?" he said, his face lighting up. "You really think they will?"

"I promise," she answered, watching him. He surged to his feet. The little round table before them rocked. "I'll go get him right now."

"You better have some coffee first."

"No. No. I'm sober." He took a deep breath and straightened up; and the fuzziness from the liquor seemed to burn out of his head.

"You'll need some place to bring him," she said. "I've got an apartment—" He shook his head.

"I'll call you," he said. "We may just move around. I'll call you tomorrow. When'll you be seeing the colonel?" He was already backing away from her.

"First thing in the morning." She got up hurriedly and came after him. "But wait—I'm coming."

"No . . . no!" he said. "I don't want you mixed up in it. I'll call you. Where'll I call you?"

"Parketon 5-45-8321—the office," she called after him. And then he was gone, through the entrance to the interior bar of the Inn. She reached the entrance herself just in time to see his tow head and square shoulders moving beyond the drinkers at the bar and out the front door of the place.

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Outside, Holman called a cab.

"Richardson Space Base," he told the driver. His permanent pass was good to the end of the week; and they passed through the gates of the Base, when they reached them, with only a nod and a yawn from the guard.

He left the cab outside the laboratories and stepped off into the shadows. He followed along paths of darkness until he came to the section where Pogey was being kept. A night guard came out of the door just before he reached it, swinging his arm with the machine pistol clipped to one wrist, and looking ahead down the corridor with the sleepy young face of a new recruit. Ted stood still in the shadows until the door of the next section had swung to behind the guard, then went inside.

He found the door he had looked through earlier. A light burned inside the room and most of the animals in the cages were curled up with their heads tucked away from the glare of it. The door was locked; but there was an emergency handle under glass above it. Ted broke the glass, turned the handle and went in; and the animals woke at the noise and looked at him wonderingly.

He opened the door to Pogey's cage.

"Pogey. . . . Pogey. . . ." he said; and the antipod leaped up and came into his arms like a child and clung there. Together they went out into the night. When he got back into the cab, Ted bulged a little around the waist under his shirt; but that was all.

The sky was paling into dawn as they got back into the city. Ted paid off the cab and took the public tubes. Wedged into a corner seat, he drowsed against the soft cushions, feeling Pogey stir warmly now and again around his waist; until, waking with a start he looked at the watch on his wrist and saw that it was after eleven a.m. He had been shuttling back and forth beneath the city for seven hours.

He got stiffly off the tubes and phoned the number June had given him. She was not in, they told him at the other end, but she should be back shortly. He hung up and found a restaurant and had breakfast. When he called for the second time, he heard her voice answer him over the phone.

"It's all right," she said. "But you better stay out of sight for a while anyway. Where can I meet you."

He thought.

"I'm going to get a hotel room," he said. "I'll register under the name of —William Wright. Where's a good hotel where they have individual entrances and lobbies for the room groups?"

"The Byngton, she said." "One hundred and eighty-seventh and Chire Street—fourth level. I'll meet you there in half an hour."

"All right," he said, and hung up.

He went to the Byngton and registered. He had just gone up to his room and let Pogey out on the bed, when the talker over the door to the room told him he had a visitor.

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"There she is—" he said to Pogey; and went out alone, closing the door of the room carefully behind him. June was waiting for him in the bright sunlight of the little glassed-in lobby a dozen yards from his door; and she ran to him as he appeared. He found himself holding her.

"We did it! We did it!" She clung to him tightly. Awkwardly, but a little gently, he disengaged her arms so that he could see her face.

"What happened?" he said.

"I phoned ahead—before I went out at nine this morning," she said, laughing up at him. "When I got there, your colonel was there, and General Daton—and some other general from the United Services. I told them you'd taken Pogey—but they knew that; and I told them you were going to keep him. And I showed them some copy I'd written." She almost pirouetted with glee. "And oh, they were angry! I'd stay out of their way for a long time, Ted. But you can keep him. You can keep Pogey!"

She hugged him again. Once more he put her arms away.

"It sounds awful easy. You sure?" he said.

"You've got to keep him quiet. You've got to keep him out of sight," she said. "But if you don't bother them, they'll leave you alone. The power of the Fourth Estate—of course it helps if you're on the national board of the Guild."

"Guild?"

"Newspaperman's Guild," she said. "Didn't I tell you, darling? Of course, I didn't. But I've been northwestern sector representative to the Guild for fourteen"—she stumbled suddenly, caught herself on the word, and the animation of her face crumpled and fled—"years," she finished, barely above a whisper, her eyes wide and palely watching upon his face.

But he only frowned impatiently.

"Then it's set for sure," he said. "I mean—from now on they'll leave us alone?"

"Oh, yes!" she said. "Yes! You and Pogey are safe, from now on."

He sighed so deeply and heavily that his shoulders heaved.

"Pogey's safe then," he murmured. Then he looked back at her. He took her hand in his. "I . . . don't know how to thank you," he said.

She stared at him, pale-faced, wide-eyed.

"Thank me!" she said.

"You did an awful lot," he said. "If it hadn't been for you . . . but we had to have faith somebody'd come through." He shook her hand, which went lifelessly up and down in his. "I just can't thank you enough. If there's ever anything I can do to pay you back." He let go of her hand and stepped backward. "I'll write you," he said. "I'll let you know how we make out." He took another step backward and turned toward the door of his room. "Well, so long—and thanks again."

"Ted!" Her voice thrust at him like an icepick, sharply, bringing him back around to face her. "Aren't you," she moved her lips stiffly with the words, "going to invite me in?"

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He rubbed the back of his neck with one hand, clumsily.

"Well," he said. "I was up all night; and I had all those drinks . . . and Pogey is pretty shy with strangers—" He turned a hand palm out toward her. "I mean, I know he'd like you; but some other time, huh?" He smiled at her wooden face. "Give me a call tomorrow, maybe? I tell you, I'm out on my feet right now. Thanks again."

He turned and opened the door to his room and went in, closing it behind him, leaving her there. Once on the inside he set the door on lock and punched the DO NOT DISTURB sign. Then he turned to the bed. Pogey was still curled up on it, and at the sight of the antipod Ted's face softened. He knelt down by the side of the bed and put his face down on a level with Pogey's. The antipod humped like an otter playing and shoved its own button nose and bead eyes close to his.

"Love me?" said Pogey.

"Love you," breathed Ted. "We're all right now, Pogey, just like we knew we'd be, aren't we?" He put his face down sideways on the coverlet of the bed and closed his eyes. "Love Pogey," he whispered. "Love Pogey."

Pogey put out a small pink tongue and stroked Ted's forehead with it.

"What now?" murmured Ted, sleepily.

Pogey's button-eyes glowed like two small flames of jet.

"Now," Pogey said, "we go to Washington—for more like you."

THE END

THE ANALYTICAL LABORATORY

The number of postcard and letter votes coming in has increased noticeably in the last two months. Our thanks . . . and that's not an "editorial we"; it expresses the acute interest of the authors in what you reader-voters decide. The old principle of "You pay for it—you choose it!" applies—and your choice determines which author gets the bonus.

We have two months issues to report:—July and August.

July, 1961

PLACE	STORY	AUTHOR	POINTS
1.	(Carries 1¢ per word bonus) The Fisherman (Concl.)	Clifford D. Simak	2.24
2.	(Carries ½¢ per word bonus) Spaceship Named McGuire	Randall Garrett	2.77
3.	The Hunch	Christopher Anvil	3.07
4.	The First One	Herbert D. Kastle	3.32
5.	Tinker's Dam	Joseph Tinker	3.44

August, 1961

1.	(1¢ per word bonus) Status Quo	Mack Reynolds	1.88
2.	(½¢ per word bonus) The Quaker Cannon	Frederik Pohl & Cyril Kornbluth	2.27
3.	Hanging by a Thread	David Gordon	2.79
4.	Lost in Translation	Larry M. Harris	3.28
5.	Flamedown	H. B. Fyfe	4.55

The Editor.

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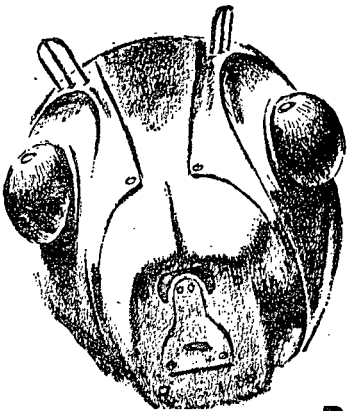

THE ASSES OF BALAAM

By DAVID GORDON

The remarkable characteristic of Balaam's ass was that it was more perceptive than its master. Sometimes a child is more perceptive—because more straightforward and logical—than an adult . . .

Illustrated by Schoenherr

It is written in the Book of Numbers that Balaam, a wise man of the Moabites, having been ordered by the King of Moab to put a curse upon the invading Israelites, mounted himself upon an ass and rode forth toward the camp of the Children of Israel. On the road, he met an angel with drawn sword, barring the way. Balaam, not seeing or recognizing the angel, kept urging his ass forward, but the ass recognized the angel and turned aside. Balaam smote the beast and forced it to return to the path, and again the angel blocked the way with drawn sword. And again the ass turned aside, despite the beating

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from Galaam, who, in his blindness, was unable to see the angel.

When the ass stopped for the third time and lay down, refusing to go further, Balaam waxed exceeding wroth and smote again the animal with a stick.

Then the ass spoke and said: "Why dost thou beat me? I have always obeyed thee and never have I failed thee. Have I ever been known to fail thee?"

And Balaam answered: "No." And at that moment his eyes were opened and he saw the angel before him.

—STUDIES IN SCRIPTURE
by Ceggawynn of Eboricum

ITH the careful precision of controlled anger, Dodeth Pell rippled a stomp along his right side. *Clop*clopclop*clop*-clopclop–*clop*clop–clop*clop*clopclop . . . Each of his twelve right feet came down in turn while he glared across the business bench at Wygor Bedis. He started the ripple again, while he waited for Wygor's answer. The ripple was a good deal more effective than just tapping one's fingers, and equally as satisfying.

Wygor Bedis twitched his mouth and allowed his eyelids to slide up over his eyeballs in a slow blink before answering. Dodeth had simply asked, "Why wasn't this reported to me before?" But Wygor couldn't find the answer as simply as that. Not that he didn't have a good answer; it was just that he wanted to couch it in exactly the right terms. Dodeth had a way with raking sarcasm that made a person tend to cringe.

Dodeth was perfectly well aware of that. He hadn't been in the Executive Office of Predator Council all these years for nothing; he knew how to handle people—when to praise them, when to flatter them, when to rebuke them, and when to drag them unmercifully over the shell-bed.

He waited, his right legs marching out their steady rhythm.

"Well," said Wygor at last, "it was just that I couldn't see any point in bothering you with it at that point. I mean, *one* specimen—"

"Of an entirely new species!" snapped Dodeth in a sudden interruption. His legs stopped their rythmic tramp. His voice rose from its usual eight-thousand-cycle rumble to a shrill squeak. "Fry it, Wygor, if you weren't such a good field man, I'd have sacked you long ago! Your trouble is that you have a penchant for bringing me problems that you ought to be able to solve by yourself and then flipping right over on your back and holding off on some information that ought to be brought to my attention immediately!"

There wasn't much Wygor could say to that, so he didn't try. He simply waited for the raking to come, and, sure enough, it came.

Dodeth's voice lowered itself to a soft purr. "The next time you have to do anything as complicated as setting a snith-trap, you just hump right down here and ask me, and I'll tell you all about it. On the other hand, if the lower levels all suddenly be-

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come infested with shelks at the same time, why, you just take care of that little detail yourself, eh? The only other alternative is to learn to think."

Wygor winced a trifle and kept his mouth shut.

Having delivered himself of his jet of acid, Dodeth Pell looked down at the data booklet that Wygor had handed him. "Fortunately," he said, "there doesn't seem to be much to worry about. Only the Universal Motivator knows how this thing could have spawned, but it doesn't appear to be very efficient."

"No, sir, it doesn't," said Wygor, taking heart from his superior's mild tone. "The eating orifice is oddly placed, and the teeth are obviously for grinding purposes."

"I was thinking more of the method of locomotion," Dodeth said. "I believe this is a record, although I'll have to look in the files to make sure. I think that six locomotive limbs is the least I've ever heard of on an animal that size."

"I've checked the files," said Wygor. "There was a four-limbed leaf-eater recorded seven hundred years ago—four locomotive limbs, that is, and two grasping. But it was only as big as your hand."

Dodeth looked through the three pages of the booklet. There wasn't much there, really, but he knew Wygor well enough to know that all the data he had thus far was there. The only thing that rankled was that Wygor had delayed for three work periods before reporting the intrusion of the new beast, and now five of them had been spotted.

He looked at the page which showed the three bathygraphs that had been taken of the new animals from a distance. There was something odd about them, and Dodeth couldn't, for the hide of him, figure out what it was. It aroused an odd fear in him, and made him want to burrow deeper into the ground.

"I can't see what keeps 'em from falling over," he said at last. "Are they as slow-moving as they look?"

"They don't move very fast," Wygor admitted, "but we haven't seen any of them startled yet. I don't see how they could run very fast, though. It must take every bit of awareness they have to stay balanced on two legs."

Dodeth sighed whistlingly and pushed the data booklet back across the business bench to Wygor. "All right; I'll file the preliminary spotting report. Now get out there and get me some pertinent data on this queer beast. Scramble off."

"Right away, sir."

"And . . . Wygor—"

"Yes, sir?"

"It's apparent that we have a totally new species here. It will be called a *wygorex,* if course, but it would be better if we waited until we could make a full report to the Keepers. So don't let any of this out—especially to the other Septs."

"Certainly not, sir; not a whistle. Anything else?"

"Just keep me posted, that's all. Scramble off."

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After Wygor had obediently scrambled off, Dodeth relaxed all his knees and sank to his belly in thought.

His job was not an easy one. He would like to have his office get full credit for discovering a new species, just as Wygor had—understandably enough—wanted to get his share of the credit. On the other hand, one had to be careful that holding back information did not constitute any danger to the Balance. Above all, the Balance must be preserved. Even the snith had its place in the Ecological Balance of the World—although one didn't like to think about sniths as being particularly useful.

After all, every animal, every plant had its place in the scheme; each contributed its little bit to maintaining the Balance. Each had its niche in the ecological architecture, as Dodeth liked to think of it. The trouble was that the Balance was a shifting, swinging, ever-changing thing. Living tissues carried the genes of heredity in them, and living tissues are notoriously plastic under the influence of the proper radiation or particle bombardment. And animals *would* cross the poles.

The World had been excellently designed by the Universal Motivator for the development and evolution of life. Again, the concept of the Balance showed in His mighty works. Suppose, for instance, that the World rotated more rapidly about its axis, thereby exposing the whole surface periodically to the deadly radiation of the Blue Sun, instead of having a rotation period that, combined with the eccentricity of the World's orbit, gave it just enough libration to expose only sixty-three per cent to the rays, leaving the remaining thirty-seven per cent in twilight or darkness. Or suppose the orbit were so nearly circular that there were no perceptible libration at all; one side would burn eternally, and the other side would freeze, since there would be no seasonal winds blowing first east, then west, bringing the warmth of the Blue Sun from the other side.

Or, again, suppose there were no Moon and no Yellow Sun to give light to the dark side. Who could live in an everlasting night?

Or suppose that the magnetic field of the World were too weak to focus the majority of the Blue Sun's output of electrons and ions on the poles. How could life have evolved at all?

Balance. And the Ultimate Universal Motivator had put part of the responsibility into the hands of His only intelligent species. And a part of that part had been put into the hands of Dodeth Pell as the head of Predator Control.

Fry it! Something was niggling at the back of Dodeth's mind, and no amount of philosophizing would shake it. He reached into the drawer of the business bench and pulled out the duplicate of Wygor's data booklet. He flipped it open and looked at the bathygraphs again.

There was no single thing about them that he could pinpoint, but the

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beasts just didn't *look* right. Dodeth Pell had seen many monstrous animals in his life, but none like this.

Most people disliked and were disgusted by a snith because of the uncanny resemblance the stupid beast had to the appearance of Dodeth's own race. There could be no question of the genetic linkage between the two species, but, in spite of the physical similarities, their actions were controlled almost entirely by instinct instead of reason. They were like some sort of idiot parody of intelligent beings.

But it was their similarity which made them loathsome. Why should Dodeth Pell feel a like emotion when he saw the bathygraphs of the two-legged thing? Certainly there was no similarity.

Wait a minute!

He looked carefully at the three-dimensional pictures again.

Fry it! He couldn't be sure—

After all, he wasn't a geneticist. Checking the files wouldn't be enough; he wouldn't know how to ask the proper cross-filing questions.

He lolled his tongue out and absently rasped at a slight itch on the back of his hand while he thought.

If his hunch were correct, then it was time to call in outside help now, instead of waiting for more information. Still, he needn't necessarily call in official, expert help just yet. If he could just get a lead—enough to verity or disprove the possibility of his hunch being correct—that would be enough for a day or two, until Wygor got more data.

There was always Yerdeth, an older parabrother on his prime-father's side. Yerdeth had studied genetics—theoretical, not applied—with the thought of going into Control, and kept on dabbling in it even after he had discovered that his talents lay in the robot design field.

"Ardan!" he said sharply.

At the other end of the office, the robot assistant ceased his work for a moment. "Yes, sir?"

"Come here a minute; I want you to look at something."

"Yes, sir."

The robot's segmented body was built very much like Dodeth's own, except that instead of the twelve pairs of legs that supported Dodeth's body, the robot was equipped with wheels, each suspended separately and equipped with its individual power source. Ardan rolled sedately across the floor, his metallic body gleaming in the light from the low ceiling. He came to a halt in front of Dodeth's business bench.

Dodeth handed Ardan the thin data booklet. "Scan through that."

Ardan went through it rapidly, his eyes carefully scanning each page, his brain recording everything permanently. After a few seconds, he looked back up at Dodeth. "A new species."

"Exactly. Did you notice anything odd about their appearance?"

"Naturally," said Ardan. "Since their like has never been seen before, it is axiomatic that they would appear odd."

Fry it! Dodeth thought. He should

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have known better than to ask a question like that of Ardan. To ask it to determine what might be called second-order strangeness in a pattern that was strange in the first place was asking too much of a robot.

"Very well, then. Make an appointment for this evening with Yerdeth Pell. I would like to see him at his home if it is convenient."

"Yes, sir," said the robot.

Evening was four work-periods away, and even after Yerdeth had granted the appointment, Dodeth found himself fidgeting in anticipation.

Twice, during the following work periods, Wygor came in with more information. He had gone above ground with a group of protection robots, finally, to take a look at the new animals himself, but he hadn't yet managed to obtain enough data to make a definitive report on the strange beasts.

But the lack of data was, in itself, significant.

Dodeth usually liked to walk through the broad tunnels of the main thoroughfares, since he didn't particularly care to ride robot-back for so short a distance, but this time he was in such a hurry to see Yerdeth that he decided to let Ardan take him.

He climbed aboard, clamped his legs to the robot's sides, and said: "To Yerdeth Pell's."

The robot said "Yes, sir," and rolled out to the side tunnel that led toward one of the main robot tunnels. When they finally came to a tunnel labeled *Robots and Passengers Only,* Ardan rolled into it and revved his wheels up to high speed, shooting down the tunnelway at a much higher velocity than Dodeth could possibly have run.

The tunnelway was crowded with passenger-carrying robots, and with robots alone, carrying out orders from their masters. But there was no danger; no robot could harm any of Dodeth's race, nor could any robot stand idly by while someone was harmed. Even in the most crowded of conditions, every robot in the area had one thing foremost in his mind: the safety of every human within sight or hearing.

Dodeth ignored the traffic altogether. He had other things to think about, and he knew—without even bothering to consider it—that Ardan could be relied upon to take care of everything. Even if it cost him his own pseudolife, Ardan would do everything in his power to preserve the safety and health of his passenger. Once in a while, in unusual circumstances, a robot would even disobey orders to save a life, for obedience was strictly secondary to the sanctity of human life, just as the robot's desire to preserve his own pseudoliving existence was outranked by the desire to obey.

Dodeth thought about his job, but he carefully kept his mind off the new beasts. He knew that fussing in his mind over them wouldn't do him any good until he had more to work with—things which only his para-

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brother, Yerdeth, could supply him. Besides, there was the problem of what to do about the hurkle breeding sites, which were being encroached upon by the quiggies. Some of the swamps on the surface, especially those that approached the Hot Belts, were being dried out and filled with dust, which decreased the area where the hurkle could lay its eggs, but increased the nesting sites for quiggies.

That, of course, was a yearly cycle, in general. As the Blue Sun moved from one side to the other, and the winds shifted accordingly, the swamps near the Twilight Border would dry out or fill up accordingly. But this year the eastern swamps weren't filling up as they should, and some precautionary measures would have to be taken to prevent too great a shift in the hurkle-quiggie balance.

Then there was the compensating migratory shift of the Hotland beasts —those which lived in the areas where the slanting rays of the Blue Sun could actually touch them, and which could not stand the, to them, terrible cold of the Darklands. Instead, they moved back and forth with the Blue Sun and remained in their own area—a hot, dry, fiery-bright hinterland occupied only by gnurrs, gnoles, and other horrendous beasts.

Beyond those areas, according to the robot patrols which had reconnoitered there, nothing lived. Nothing could. No protoplasmic being could exist under the direct rays of the Blue Sun. Even the metal-and-translite bodies of a robot wouldn't long protect the sensitive mechanisms within from the furnace heat of the huge star.

Each species had its niche in the World. Some, like the hurkle, lived in swamp water. Others lived in lakes and streams. Still others flew in the skies or roamed the surface or climbed the great trees. Some, like Dodeth's own people, lived beneath the surface.

The one thing an intelligent species had to be most careful about was not to disturb the balance with their abilities, but to work to preserve it. In the past, there had been those who had built cities on the surface, but the cities had removed the natural growth from large areas, which, in turn, had forced the city people to import their food from outside the cities. And that had meant an enforced increase in the cultivation of the remaining soil, which destroyed the habitats of other animals, besides depleting the soil itself. The only sensible way was to live *under* the farmlands, so that no man was ever more than a few hundred feet from the food supply. The Universal Motivator had chosen that their species should evolve in burrows beneath the surface, and if that was the niche chosen for Dodeth's people, then that was obviously where they should remain to keep the Balance.

Of course, the snith, too, was an underground animal, though the tunnels were unlined. The snith's tunnels ran between and around the armored tunnels of Dodeth's people, so that each city surrounded the other

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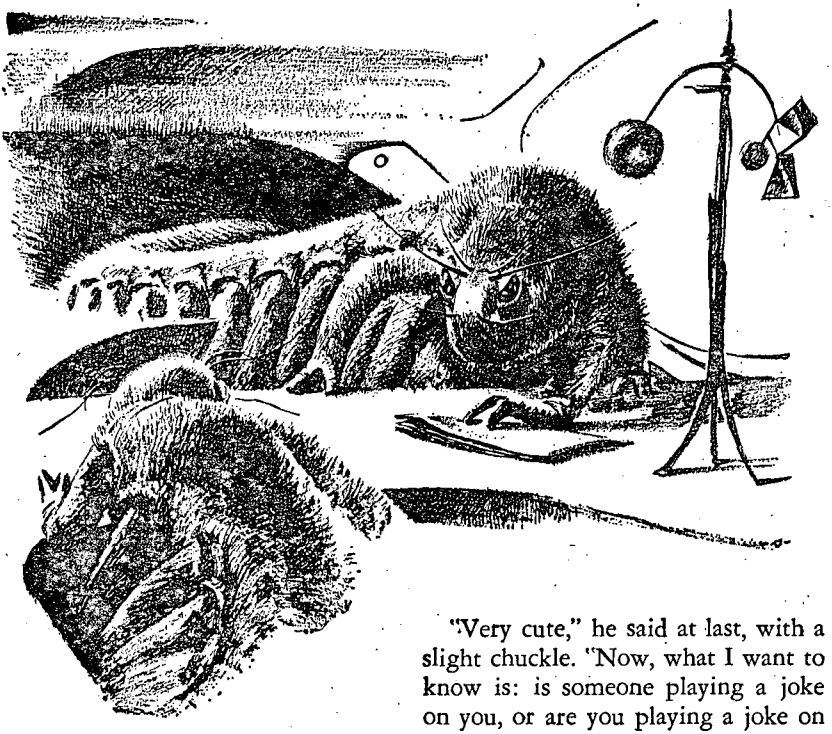

without contact—if the burrows of the snith could properly be called a city.

"Yerdeth Pell's residence," said Ardan.

"Ah, yes." Dodeth, his thoughts interrupted, slid off the back of the robot and flexed his legs. "Wait here, Ardan. I'll be back in an hour or so." Then he scrambled over to the door which led to Yerdeth's apartment.

Twenty minutes later, Yerdeth Pell looked up from the data book facsimiles and scanned Dodeth's face with appraising eyes.

"Very cute," he said at last, with a slight chuckle. "Now, what I want to know is: is someone playing a joke on you, or are you playing a joke on me?"

Dodeth's eyelids slid upwards in a fast blink of surprise. "What do you mean?"

"Why, these bathygraphs." Yerdeth tapped the bathygraphs with a wrinkled, horny hand. He was a good deal older than Dodeth, and his voice had a tendency to rasp a little when the frequency went above twenty thousand cycles. "They're very good, of course. *Very* good. The models have very fine detail to them. The eyes, especially, are good; they look as if they really *ought* to be built that way." He smiled and looked up at Dodeth.

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Dodeth resisted an urge to ripple a stomp. "Well?" he said impatiently.

"Well, they can't be real, you know," Yerdeth replied mildly.

"Why not?"

"Oh, come, now, Dodeth. What did it evolve from? An animal doesn't just spring out of nowhere, you know."

"New species are discovered occasionally," Dodeth said. "And there are plenty of mutants and just plain freaks."

"Certainly, certainly. But you don't hatch a snith out of a hurkle egg. Where are your intermediate stages?"

"Is it possible that we might have missed the intermediate stage?"

"I said 'stages'. Plural. Pick any known animal—*any* one—and tell me how many genetic changes would have to take place before you'd come up with an animal anything like this one." Again he tapped the bathygraph. "Take that eye, for instance. The lid goes down instead of up, but you notice that there's a smaller lid at the bottom that *does* go up, a little ways. The closest thing to an eye like that is on the hugl, which has eyelids on top, that lower a little. But the hugl has eighteen segments; sixteen pairs of legs and two pairs of feeding claws. Besides, it's only the size of your thumb-joint. What kind of gene mutation would it take to change that into an animal like the one in this picture?

"And look at the size of the thing. If it weren't in that awkward vertical position, if it were stretched out on the ground, it'd be as long as a human. Look at the size of those legs!

"Or, take another thing. In order to walk on those two legs, the changes in skeletal and visceral structure would have to be tremendous."

"Couldn't we have missed the intermediate stages, then?" Dodeth asked stubbornly. "We've missed the intermediates before, I dare say."

"Perhaps we have," Yerdeth admitted, "but if you boys in the Ecological Corps have been on your toes for the past thousand years, we haven't missed many. And it would take at least that long for something like this to evolve from anything we know."

"Even under direct polar bombardment?"

"Even under direct polar bombardment. The radiation up there is strong enough to sterilize a race within a very few generations. And what would they eat? Not many plants survive there, you know.

"Oh, I don't say it's flatly im*possi*ble, you understand. If a female of some animal or other, carrying a freshly-fertilized zygote, and her species happened to have all the necessary potential characteristics, and a flood of ionizing radiation went through the zygote at exactly the right time, and it managed to hit just the right genes in just the right way . . . well, I'm sure you can see the odds against it are tremendous. I wouldn't even want to guess at the order of magnitude of the exponent I'd have to put on a ten in order to give you the odds against it."

Dodeth didn't quite get that last

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statement, but he let it pass. "I am going to pull somebody's legs off, one by one, come next work period," he said coldly. "One . . . by . . . one."

He didn't, though. Rather than accuse Wygor, it would be better if Wygor were allowed to accuse himself. Dodeth merely wanted to wait for the opportunity to present itself. And then—ah, *then* there would be a roasting!

The opportunity came in the latter part of the next work period. Wygor, who had purportedly been up on the surface for another field trip, scuttled excitedly into Dodeth's office, wildly waving some bathygraph sheets.

"Dodeth, sir! Look! I came down as soon as I saw it! I've got the 'graphs right here! Horrible!"

Before Dodeth could say anything, Wygor had spread the sheets out fanwise on his business bench. Dodeth looked at them and experienced a moment of horror himself before he realized that these were—these *must* be—doctored bathygraphs. Even so, he gave an involuntary gasp.

The first 'graphs had been taken from an aerial reconnaissance robot winging in low over the treetops. The others were taken from a higher altitude. They all showed the same carnage.

An area of several thousand square feet—*tens* of thousands!—had been cleared of trees! They had been ruthlessly cut down and stacked. Bushes and vines had gone with them, and the grass had been crushed and plowed up by the dragging of the great fallen trees. And there were obvious signs that the work was still going on. In the close-ups, he could see the bipedal beasts wielding cutting instruments.

Dodeth forced himself to calmness and glared at the bathygraphs. Fry it, they *had* to be fakes. A new species might appear only once in a hundred years, but according to Yerdeth, this couldn't possibly be a new species. What was Wygor's purpose in lying, though? Why should he falsify data? And it must be he; he had said that he had seen the beasts himself. Well, Dodeth would have to find out.

"Tool users, eh?" he said, amazed at the calmness of his voice. Such animals weren't unusual. The sniths used tools for digging and even for fighting each other. And the hurkles dammed up small streams with logs to increase their marshland. It wasn't immediately apparent what these beasts were up to, but it was far too destructive to allow it to go on.

But, fry it all, it *couldn't* be going on!

There were only two alternatives. Either Wygor was a liar or Yerdeth didn't know what he was talking about. And there was only one way of finding out which was which.

"Ardan! Get my equipment ready! We're going on a field trip! Wygor, you get the rest of the expedition ready; you and I are going up to see what all this is about." He jabbed at the communicator button. "Fry it! Why should this have to happen in my sector? Hello! Give me an inter-

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city connection. I want to talk to Baythim Venns, co-ordinator of Ecological Control, in Faisalla."

He looked up at Wygor. "Scatter off, fry it! I want to—Oh, hello, Baythim, sir. Dodeth. Have you had any reports on a new species—a bipedal one? What? No, sir; I'm not kidding. One of my men has brought in 'graphs of the thing. Frankly, I'm inclined to think it's a hoax of some kind, but I'd like to ask you to check to see if it's been reported in any of the other areas. We're located a little out of the way here, and I thought perhaps some of the stations farther north or south had seen it. Yes. That's right: two locomotive limbs, two handling limbs. Big as a human, and they hold their bodies perpendicular to the ground. Yes, sir, I know it sounds silly, and I'm going out to check the story now, but you ought to see these bathygraphs. If it's a hoax, there's an expert behind it. Very well, sir; I'll wait."

Dodeth scowled. Baythim had sounded as if he, Dodeth, had lost his senses.

Maybe I have, he thought. *Maybe I'll start running around mindlessly and get shot down by some patrol robot who thinks I'm a snith.*

Maybe he should have investigated first and then called, when he was sure, one way or another. Maybe he should have told Baythim he was certain it was a hoax, instead of hedging his bets. Maybe a lot of things, but it was too—

"Hello? Yes, sir. None, eh? Yes, sir. Yes, sir; I'll give you a call as soon as I've checked. Yes, sir. Thank you, sir."

Dodeth felt like an absolute fool. Individually and collectively, he consigned to the frying pan Baythim, Wygor, Yerdeth, the new beast—if it existed—and, finally, himself.

By the time he had finished his all-encompassing curse, his two dozen pistoning legs had nearly brought him to the equipment room, where Ardan and Wygor were waiting.

Four hours and more of steady traveling did very little to sweeten Dodeth Pell's temper. The armored car was uncomfortable, and the silence within it was even more uncomfortable. He did not at all feel like making small talk with Wygor, and he had nothing as yet to say to Ardan or the patrol robots who were rolling along with the armored car.

One thing he had to admit: Wygor certainly didn't act like a man who was being carried to his own doom—which he certainly was if this was a hoax. Wygor would lose all position and be reduced to living off his civil insurance. He would be pitied by all and respected by none.

But he didn't look as though that worried him at all.

Dodeth contented himself with looking at the scenery. The car was not yet into the forest country; this was all rolling grassland. Off to one side, a small herd of grazing grancos lifted their graceful heads to watch the passage of the expedition, then lowered them again to feed. A fanged zitibanth, disturbed in the act of

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stalking the grancos, stiffened all his legs and froze for a moment, looking balefully at the car and the robots, then went on about his business.

When they came to the forest, the going became somewhat harder. Centuries ago, those who had tried to build cities on the surface had also built paved strips to make travel by car easier and smoother, and Dodeth almost wished there were one leading to the target area.

Fry it, he *hated* traveling! Especially in a lurching armored car. He wished he were bored enough or tired enough to go to sleep.

At last—at *long* last—Wygor ordered the car to stop. "We're within two miles of the clearing, sir," he told Dodeth.

"All right," Dodeth said morosely. "We'll go the rest of the way on foot. I don't want to startle them at this stage of the game, so keep it quiet and stay hidden. Tell the patrol robots to spread out, an tell them I want all the movie shots we can get. I want all the Keepers to see these things in action. Got that? Then let's get moving."

They crept forward through the forest, Dodeth and Ardan taking the right, while Wygor and his own robot, Arsam, stayed a few yards away to the left. They were all expert woodsmen—Dodeth and Wygor by training and experience, and the robots by indoctrination.

Even so, Dodeth never felt completely comfortable above ground, with nothing over his head but the clouded sky.

The team had purposely chosen to approach from a small rise, where they could look down on the clearing without being seen. And when they reached the incline that led up to the ridge, one of the armed patrol robots who had been in the lead took a look over the ridge and then scuttled back to Dodeth. "They're there, sir."

"What are they doing?" Dodeth asked, scarcely daring to believe.

"Feeding, I believe, sir. They aren't cutting down any trees now; they're just sitting on one of the logs, feeding themselves with their handling limbs."

"How many are there?"

"Twenty, sir."

"I'll take a look." He scrambled up the ridge and peeked over.

And there they were, less than a quarter of a mile away.

Dazedly, Dodeth took a pair of field glasses from Ardan and focused them on the group.

Oh, they were real, all right. No doubt of that. None whatever. Mechanically, he counted them. Twenty. Most of them were feeding, but four of them seemed to be standing a little apart from the others, watching the forest, acting as lookouts.

Typical herd action, Dodeth thought.

He wished Yerdeth were here; he'd show that fool what good his ten-to-the-billionth odds were.

And yet, in another way, Dodeth had the feeling that his parabrother was right. How could the life of the World have suddenly evolved such

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creatures? For they looked even more impossible when seen in the flesh.

Their locomotive limbs ended in lumpy protuberances that showed no sign of toes, and they were covered all over with a dull gray hide, except for the hands at the ends of their handling limbs and the necks and the faces of their oddly-shaped heads, where the skin ranged in color from a pinkish tan to a definite brown, depending on the individual. There was no hair anywhere on their bodies except on the top and back of their heads. No, wait—there were two long tufts above each eye. They—

"Do you see what they're *eating?*" Wygor's voice whispered.

Dodeth hadn't. He'd been too busy looking at the things themselves. But when he did notice, he made a noise like a throttled *"Geep!"*

Hurkles!

There were few enough of the animals—only a small population was needed to keep the Balance, but they were important. And the swamps were drying up, and the quiggies were moving in on them, and *now*—

Dodeth made a hasty count. Twenty! By the Universal Motivator, these predators had eaten a hurkle apiece!

Overhead, the Yellow Sun, a distant dot of intensely bright light, shed its wan glow over the ghastly scene. Dodeth wished the Moon were out; its much brighter light would have shown him more detail.

But he could see well enough to count the gnawed skeletons of the little, harmless hurkles. Even the Moon, which wouldn't bring morning for another fifteen work periods yet, couldn't have made it any plainer that these beasts were deadly dangerous to the Balance.

"How often do they eat?" he asked in a strained voice.

It was Wygor's robot, Arsam, who answered. "About three times every work period. They sleep then. Their metabolic cycle seems to be timed about the same as yours, sir."

"Gaw!" said Dodeth. "Sixty hurkles per sleep period! Why, they'll have the whole hurkle population eaten before long! Wygor! As soon as we can get shots of all this, we're going back! There's not a moment to lose! This is the most deadly dangerous thing that has ever happened to the World!"

"Fry me, yes," Wygor said in an awed voice. "Three hurkles in one period."

"Allow me to correct you, sir," said the patrol robot. "They do not eat that many hurkles. They eat other things besides."

"Like what, for instance?" Dodeth asked in a choked voice.

The robot told him, and Dodeth groaned. "Omnivores! That's even worse! Ardan, pass the word to the scouts to get their pictures and meet at that tree down there behind us in ten minutes. We've got to get back to the city!"

Dodeth Pell laid his palms flat on the speaker's bench and looked

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around at the assembled Keepers of the Balance, wise and prudent thinkers, who had spent lifetimes in ecological service and had shown their capabilities many times over.

"And that's the stuation, sirs," he said, after a significant pause. "The moving and still bathygraphs, the data sheets, and the samplings of the area all tell the same story. I do not feel that I, alone, can make the decision. Emotionally, I must admit, I am tempted to destroy all twenty of the monsters. Intellectually, I realize that we should attempt to capture at least one family group—if we can discover what constitutes a family group in this species. Unfortunately, we cannot tell the sexes apart by visual inspection; the sex organs themselves must be hidden in the folds of that gray hide. And this is evidently not their breeding season, for we have seen no sign of sexual activity.

"We have very little time, sirs, it seems to me. The damage they have already done will take years to repair, and the danger of upsetting the Balance irreparably grows exponentially greater with each passing work period.

"Sirs, I ask your advice and your decision."

There was a murmur of approval for his presentation as he came down from the speakers bench. Then the Keepers went into their respective committee meetings to discuss the various problems of detail that had arisen out of the one great problem.

Dodeth went into an anteroom and tried to relax and get a little sleep—though he doubted he'd get any. His nerves were too much on edge.

Ardan woke him gently. "Your breakfast, sir."

Dodeth blinked and jerked his head up. "Oh. Uhum. Ardan! Have the Keepers reached any decision yet?"

"No, sir; not yet. The data are still coming in."

It was three more work periods before the Keepers called Dodeth Pell before them again. Dodeth could almost read the decision on their faces—there was both sadness and determination there.

"It was an uncomfortable decision, Dodeth Pell," said the Eldest Keeper without preliminary, "but a necessary one. We can find no place in the Ecological Balance for this species. We have already ordered a patrol column of two hundred fully-armed pesticide robots to destroy the animals. Two are to be captured alive, if possible, but, if not, the bodies will be brought to the biological laboratories for study. Within a few hours, the species will be nearly or completely extinct.

"By the way, you may tell your assistant, Wygor, that the animal will go down in the files as *wygorex.* A unique distinction for him, in many ways, but not, I fear, a happy one."

Dodeth nodded silently. Now that the decision had been made, he felt rather bad about it. Something in him rebelled at the thought of a species becoming extinct, no matter how

Continued on page 156

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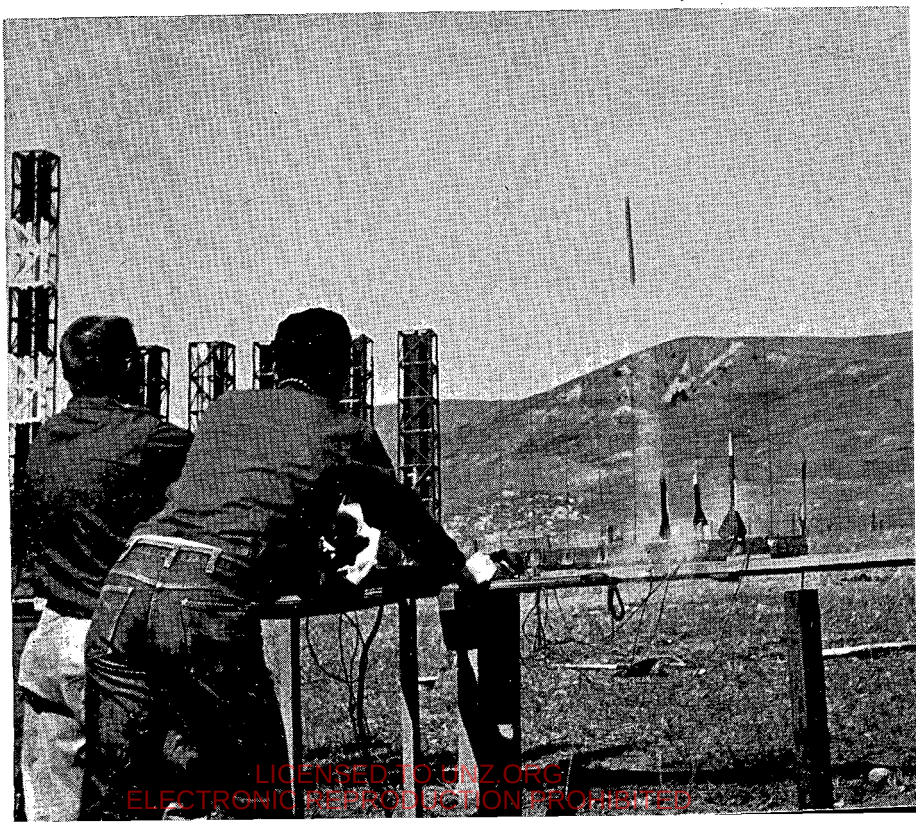
REPORT ON THE ELECTRIC FIELD ROCKET

By G. HARRY STINE

Dr. Dudley's report on the electric field rocket effect on small rockets was run in an effort to get others to check his findings. This article reports the results of those checks.

In the high-dry foothills of the Rocky Mountains, a model rocket similar to the ones used to carry out the NAR experiments with electric field rockets streaks from its launcher and heads skyward.

Photo by author.



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WHEN Dr. H. C. Dudley's article on the Electric Field Rocket appeared in these pages in the November 1960 issue, his investigations aroused a great deal of interest among the model rocketeers of the National Association of Rocketry. There appeared to be some controversy over Dr. Dudley's findings, both among scientists and among model rocketeers. There was only one way to settle the question once and for all: perform Dudley's experiment with model rockets. If Dudley were right, the experiment would be a true predictable one and would duplicate his findings. This is in the finest tradition of science. No amount of discussion will settle the question; it must be settled by checking the theory with experiment. The results must then be published.

The National Association of Rocketry was in a unique position to carry out the model rocketry experiments of Dudley. Since 1957, the NAR has developed in-flight optical tracking systems for model rockets that have reasonable accuracy. Model rocket engine manufacturers can supply propulsion systems of very close tolerance. Many NAR members are expert model makers capable of building very fine model rockets.

(In case you are a newcomer to these pages, let me explain at this point that the NAR is the nation's largest nonprofessional rocket society and is affiliated with the National Aeronautic Association. Model rocketry, the major province of the NAR, concerns itself with safe, reliable model rockets that are powered by commercial model rocket engines, are made from nonmetallic materials, and contain recovery systems. The NAR has helped establish model rocketry as a safe, scientific, and educational aero-space hobby in the United States. End of commercial.)

Some of the young rocketeers who participated in the electric field rocket tests place their models on the launchers at the NAR's Peak City Rocket Range near Colorado Springs. *Left to right:* John S. Roe, Bruce Unruh, Doug Hylton, and Lynn Ericson. The electric field test models were launched from the rod launchers on the left; these were each grounded to a steel post in the ground.

The Peak City Section of the NAR in Colorado Springs, Colorado was perfectly situated to carry out the tests. They are a group of about forty modelers under the direction of William S. Roe, a city councilman and an officer of the NAR. Their Peak City Model Rocket Range is the most extensive and well-equipped in the country, consisting of forty acres of flat prairie nestled up against the foothills of the Rocky Mountains at an elevation of 6,380 feet above sea level. Unlike the Eastern Sections of the NAR who were generally snowed-in completely during the winter of 1960-1961, the Peak City Section is in a part of the country where there are clear skies during most of the year. Furthermore, the cli-

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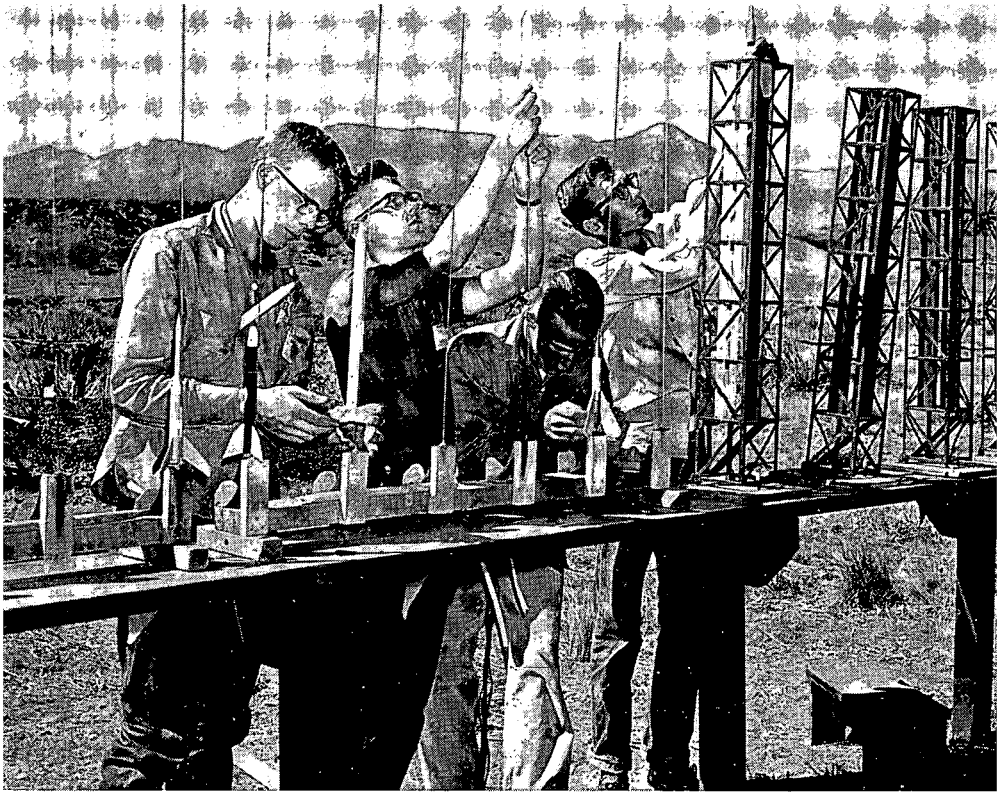

Photo by Cloyd Brunson

mate meets the Dudley specifications beautifully—high altitude, clear skies, low humidity.

Supervised by Bill Roe, five teenage model rocketeers undertook the task of running the tests. None of these people had any contact with Dr. Dudley whatsoever; they knew him only from his Analog article. They used his article as a "cook book" of instructions for building their models, following his directions exactly.

Four different series of models were used. The design of the models varied from series to series, but the five rockets in each series were constructed as nearly alike as possible, with the exception of the presence or absence of the conductive layer.

In each series, the five models differed as follows:

Model 1: A control model. A standard model rocket built of paper and balsa wood with a clear layer of Krylon sprayed inside and out. This

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model was the standard against which the performance of the others in the series would be compared.

Model 2: Identical to Model 1 except with a layer of Krylon aluminum paint sprayed on the *inside* of the model over a clear Krylon spray base. The exterior of Model 2 was a spray coat of clear Krylon.

Model 3: Identical to Model 1 except with a coat of Krylon aluminum paint sprayed over both the inside *and* the outside of the model over a coat of clear Krylon.

Model 4: Identical to Model 1 except with a layer of *aluminum foil* on the inside of the model over a clear Krylon base. Exterior was sprayed with clear Krylon.

Model 5: Identical to Model 1 except with a layer of aluminum foil on both the inside *and* outside of the model over a spray coat of clear Krylon.

The reason for using Models 4 and 5 was to insure a true electrically conductive layer by means of the foil. Peak City Section rolls its own paper tubes for model rocket bodies, and was, therefore, able to roll special tubes with inside and/or outside foil

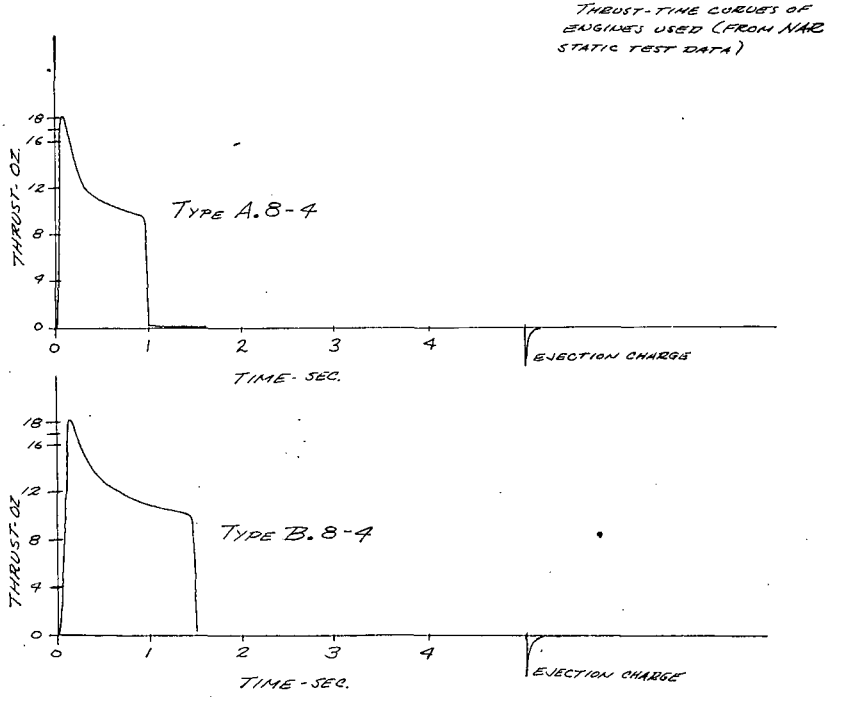

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Photo by Cloyd Brunson

Bob Barley, one of the members of the NAR Peak City Section, tracks a model rocket in flight with one of the optical theodolites used in the altitude determinations for the electric field rocket tests. The theodolite was built by the teen-age members of the group from surplus parts and can be read to an accuracy of ½°. The telephone handset is connected by land line to the launch point so that the tracking operator can hear the countdown and relay his tracking angles back for data reduction.

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layers. This was an admitted departure from the Dudley instructions designed to doublecheck the premises.

The model rocket engines used in the tests were NAR Type A.8-4 and NAR Type B.8-4. The NAR has developed a method of classifying commercial model rocket engines by total impulse—thrust multiplied by duration—and has created a coding system for describing the performance of such engines. The first letter indicates the total impulse range, the first number indicates the thrust in pounds with fractional pounds expressed as decimals, and the dash number indicates the number of seconds—to the nearest second—of time delay built into the engine.

The Type A.8-4 engines used have an average thrust of about ten ounces and a duration of 1.0 seconds. They use a solid propellant with an end-burning grain. They have a paper case and a ceramic nozzle. There is a powder train time-delay charge built into these engines to activate the recovery system at a predetermined time after cessation of thrust. The Type A.8-4 pops the recovery system four seconds after take-off.

The other engine type used, the Type B.8-4, has the same average thrust, but a duration of 1.5 seconds. It also has a time delay of four seconds.

All of these engines were commercially made by a model rocket engine manufacturer by means of a fully automatic machine. (This machine itself would be worth a complete article, since it takes the casings, the ceramic, the propellant, and the delay composition, puts them all together into a tiny rocket engine, prints a label on it, and pops it into a box—all without a human being in the same building with it. Furthermore, it spits out a completed model rocket engine every 5.5 seconds!) The engines used in the tests were selected from the same production lot. One from each batch of one hundred engines had been static tested on a recording-type test stand. The accompanying thrust-time curve was obtained from the sample engines of the production batch used. Tolerance on these engines is very close. Static test a dozen in a row from a lot, and you can lay the thrust-time curves right over one another with such nice matching that it might cause Thiokol to turn green with envy!

Doug Hylton and Tom Rhue built the models used. Bill Robson, Harry Pool, and Mike Konshak flew the models, tracked them, and performed the data reduction along with Hylton and Rhue.

In flight, the models were all tracked by means of optical theodolites constructed by the boys. These theodolites are little jewels. They consist of surplus eight-power elbow telescopes with reticle and cross hairs. They are attached to alt-azimuth mountings with elevation and azimuth dials. Mounted on sturdy surplus tripods, they are accurate to at least ½°. During flight operations, the person manning the theodolite is

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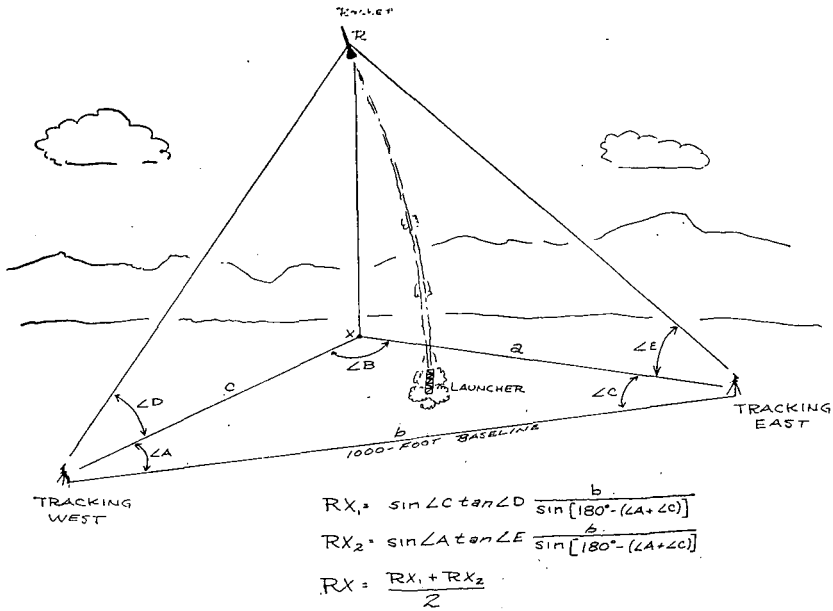

connected to the firing point by a telephone so that he hears the countdown and can read back his azimuth and elevation angles. He tracks the model from the instant of take-off to peak altitude, where he ceases tracking and locks his tracking mount.

The standard NAR tracking system was used for the tests. It consists of two tracking stations on a measured baseline. If you will look at the tracking system geometry in the accompanying drawing, you will see that it does not matter where the tracking stations are with respect to the launch area, or where the model is in the air with respect to the ground. If the baseline between the stations is known, and if the tracking angles from each station are known, it is possible to determine by triangulation exactly how high the model is. Moored balloon calibrations of this system have shown it to be accurate to ±2% for altitudes up to 1,000 feet. (If you want better accuracy or are flying higher than this, use a longer baseline!)

(A three-station system is admittedly more accurate, but the data reduction gets messy and cannot easily be handled in the field with trig tables and a slipstick.)

The tracking angles from each sta-

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NATIONAL ASSOCIATION OF ROCKETRY

Electric Field Rocket Test Data

Date 29 oct 1960 Time of launching 1044 Temperature 58°

Humidity 31% Wind velocity and direction 9 WNW Barometric Pressure 29.3

Sky condition Clear Elev. launcher above sea level 6350

Type of model Rhue Model 4 Launch weight 1.75 oz.

Motor type A.8-4 Atmospheric charge in volts/cm ———

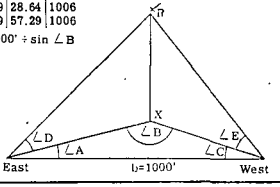
Description of conductive layer aluminum paint inside & out

Flight characteristics of model very good

∠	sin	tan	V	∠	sin	tan	V	∠	sin	tan	V	∠	sin	tan	V	∠	sin	tan	V
1°	.02	.02		21°	.36	.38	2778	41°	.66	.87	1515	61°	.87	1.80	1142	81°	.99	6.31	1010
2°	.03	.03		22°	.37	.40	2702	42°	.67	.90	1492	62°	.88	1.88	1136	82°	.99	7.12	1009
3°	.05	.05		23°	.39	.42	2564	43°	.68	.93	1470	63°	.89	1.96	1124	83°	.99	8.14	1009
4°	.07	.07		24°	.41	.45	2439	44°	.69	.97	1449	64°	.90	2.05	1111	84°	.99	9.51	1008
5°	.09	.09		25°	.42	.47	2381	45°	.71	1.00	1408	65°	.91	2.14	1099	85°	.99	11.43	1008
6°	.10	.11		26°	.44	.49	2273	46°	.72	1.04	1389	66°	.91	2.25	1093	86°	.99	14.30	1007
7°	.12	.12	8333	27°	.45	.51	2222	47°	.73	1.07	1370	67°	.92	2.36	1087	87°	.99	19.08	1007
8°	.14	.14	7142	28°	.47	.53	2127	48°	.74	1.11	1351	68°	.93	2.48	1075	88°	.99	28.64	1006
9°	.16	.16	6250	29°	.48	.55	2083	49°	.75	1.15	1333	69°	.93	2.61	1070	89°	.99	57.29	1006
10°	.17	.18	5882	30°	.50	.58	2000	50°	.77	1.19	1299	70°	.94	2.75	1064				
11°	.19	.19	5263	31°	.52	.60	1923	51°	.78	1.23	1282	71°	.95	2.90	1053				
12°	.21	.21	4762	32°	.53	.62	1887	52°	.79	1.28	1266	72°	.95	3.08	1048				
13°	.23	.23	4348	33°	.54	.65	1852	53°	.80	1.33	1250	73°	.96	3.27	1042				
14°	.24	.25	4166	34°	.56	.67	1786	54°	.81	1.38	1234	74°	.96	3.49	1036				
15°	.26	.27	3846	35°	.57	.70	1754	55°	.82	1.43	1220	75°	.97	3.73	1031				
16°	.28	.29	3571	36°	.59	.73	1695	56°	.83	1.43	1205	76°	.97	4.01	1031				
17°	.29	.31	3448	37°	.60	.75	1667	57°	.84	1.54	1190	77°	.98	4.33	1021				
18°	.31	.32	3125	38°	.62	.78	1613	58°	.85	1.60	1176	78°	.98	4.70	1017				
19°	.33	.34	3030	39°	.63	.81	1587	59°	.86	1.66	1163	79°	.98	5.14	1014				
20°	.34	.36	2941	40°	.64	.84	1562	60°	.87	1.73	1149	80°	.98	5.67	1013				

N A R

V = 1000' ÷ sin ∠B



Filled in by RECORDER

Launcher 3 Type launcher Red Misfire ☐ ☐ ☐ Track lost ☐

Tracking East: Azimuth (∠A) 60 ° sin .87 ① Elevation (∠D) 17 ° tan .31 ②

Tracking West: Azimuth (∠C) 60 ° sin .87 ③ Elevation (∠E) 16 ° tan .29 ④

120 = ∠B. Table value 1149 ⑤

Recorder Roe

Filled in by DATA REDUCTION

$\frac{1149}{⑤} \times ② .31 \times ③ .87 = 310'$

$\times ④ .29 \times ① .87 = 290'$

If ∠C - ∠A is less than 90°, read direct for ∠B.
If ∠C - ∠A is greater than 90°, subtract from 180° for ∠B.

600 ÷2 300 = average altitude

Data reduced by D.R.

tion are reported in to the launch area where they are copied down. Simple trig reduces these angles to altitude data. Although model rocketeers have worked out three different analog computers for range use to do this, the results of these tests were reduced by means of tables and computation. Even at that, the NAR data reduction system has been refined to such a point that a reduced altitude can be computed in less than a minute by reading off five values from a table and running six operations on a slide rule. At the 1960 Boy Scout Jamboree, the DR crew was doing it in twenty-five seconds!

Tracking small rockets is not easy—it takes experience!

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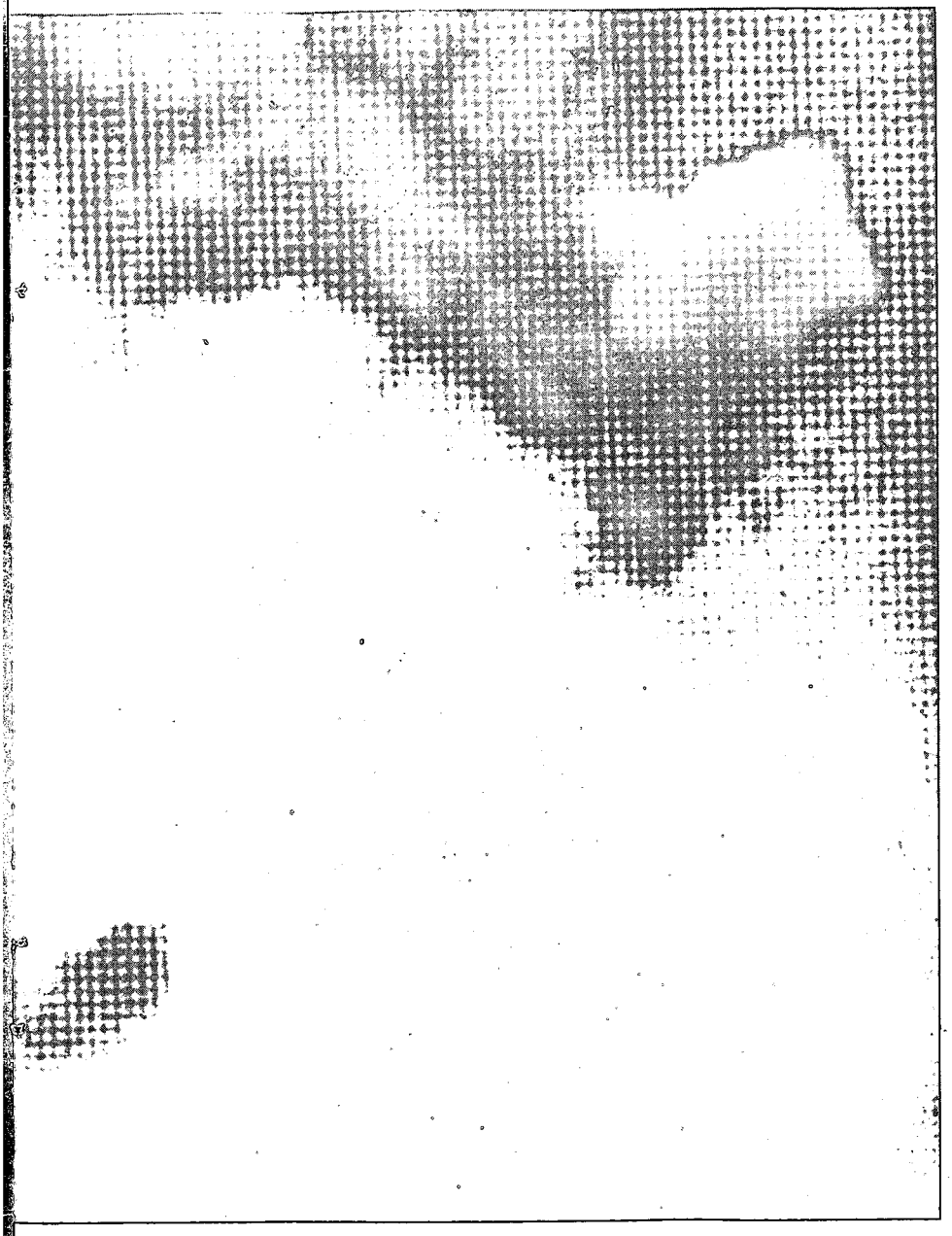

NAR photo

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Photo by author

Reduction of the tracking angles to altitude during the tests was achieved with the graphical system shown in use here and by means of trigonometric computation, each serving as a cross-check against the other.

The tests of Series One took place on October 29, 1960. High winds made things difficult until January 7, 1961, when the remaining three series were flown.

Special flight sheets were used for the electric field rocket tests, and one of these is reproduced with this article. All possible data was recorded for each flight—time, temperature, humidity, winds, barometer, sky, model type, launch weight, motor type, conductive layer used, and general flight characteristics. The Peak City Section hoped to be able to measure the atmospheric charge in volts/cm as well, but they were unable to complete the equipment in time for the flight tests.

In all, twenty flights were made.

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FLIGHT DATA SUMMARY

FLT.	DATE	TIME	TEMP	HUMID.	WIND	BARO	SKY	LAUNCH ELEV.	LAUNCH WT.	ENG.	COND. LAYER	FLIGHT	ALT.
1	10/29/60	1040	58	31	WNW 2	29.3	CL	6380	1.0	A8-4	NONE	OK	336
2	10/29/60	1043	58	31	WNW 3	29.3	CL	6380	1.75	A8-4	PAINT INSIDE	OK	386
3	10/29/60	1044	58	31	WNW 4	29.3	CL	" "	1.75	A8-4	PAINT INSIDE & OUT	OK	300
4	10/29/60	1148	54	31	WNW 8	29.1	CL	" "	1.75	A8-4	FOIL INSIDE	OK	NO TRACK
5	10/29/60	1146	54	31	WNW 8	29.1	CL	" "	1.75	A8-4	FOIL INSIDE & OUT	INTO WIND	210
6	11/1/61	1115	42	44	SSE 5	30.05	CL	" "	—	B8-4	NONE	INTO WIND	655
7	11/1/61	1117	42	44	SSE 6	30.05	CL	" "	—	B8-4	PAINT INSIDE	WOBBLE	569
8	11/1/61	1120	42	44	SSE 7	30.05	CL	" "	—	B8-4	PAINT INSIDE & OUT	WOBBLE	635
9	11/1/61	1121	42	44	SSE 6	30.05	CL	" "	—	B8-4	FOIL INSIDE	INTO WIND	591
10	11/1/61	1123	42	44	SSE 5	30.05	CL	" "	—	B8-4	FOIL IN & OUT	INTO WIND	625
11	11/1/61	1103	43	44	SSE 4	30.05	CL	" "	—	B8-4	NONE	OK	743
12	11/1/61	1105	43	44	SSE 7	30.05	CL	" "	—	B8-4	PAINT INSIDE	OK	739
13	11/1/61	1108	43	44	SSE 7	30.05	CL	" "	—	B8-4	PAINT IN & OUT	INTO WIND	485
14	11/1/61	1110	43	44	SSE 7	30.05	CL	" "	—	B8-4	FOIL INSIDE	INTO WIND	656
15	11/1/61	1111	43	44	SSE 7	30.05	CL	" "	—	B8-4	FOIL IN & OUT	INTO WIND	617
16	11/1/61	1125	41	44	SE 3	30.05	CL	" "	—	A8-4	NONE	INTO WIND	314
17	11/1/61	1128	41	44	SE 7	30.05	CL	" "	—	A8-4	FOIL INSIDE	INTO WIND	385
18	11/1/61	1130	41	44	SE 8	30.05	CL	" "	—	A8-4	FOIL IN & OUT	INTO WIND	345
19	11/1/61	1131	41	44	SE 8	30.05	CL	" "	—	A8-4	PAINT INSIDE	OK	427
20	11/1/61	1132	41	44	SSE 5	30.05	CL	" "	—	A8-4	PAINT FOIL OUT	OK	358

Nineteen of these were tracked, and track was lost on one flight.

A summary of the flight test data, as compiled on the accompanying table, shows some interesting things that should settle the electric-field rocket question. The results are probably best summed up in Bill Roe's comment, "I have been unable to detect any difference in the flight of the rockets. They were built as closely as possible to the Dudley specs. I suggest Captain Dudley be invited to bring his rockets to the range and try them."

The NAR has drawn the following conclusions from its tests of the Dudley Electric Field Rocket:

1. There is very little apparent difference in the achieved altitude or flight characteristics of model rockets when provided with an electrically-conductive surface.

2. Model rockets with and without conductive coatings flown on separate days with different weather factors show very little difference in performance.

3. The altitude spread of the results is that normally experienced with ordinary models of identical construction, probably due to small difference in engine performance, minute difference in models, variations in launching conditions, and tracking system error.

The testing crew decided to discontinue the project after twenty flights because it seemed to them that there was nothing to be gained by further flying. The test flights told them that they weren't getting the

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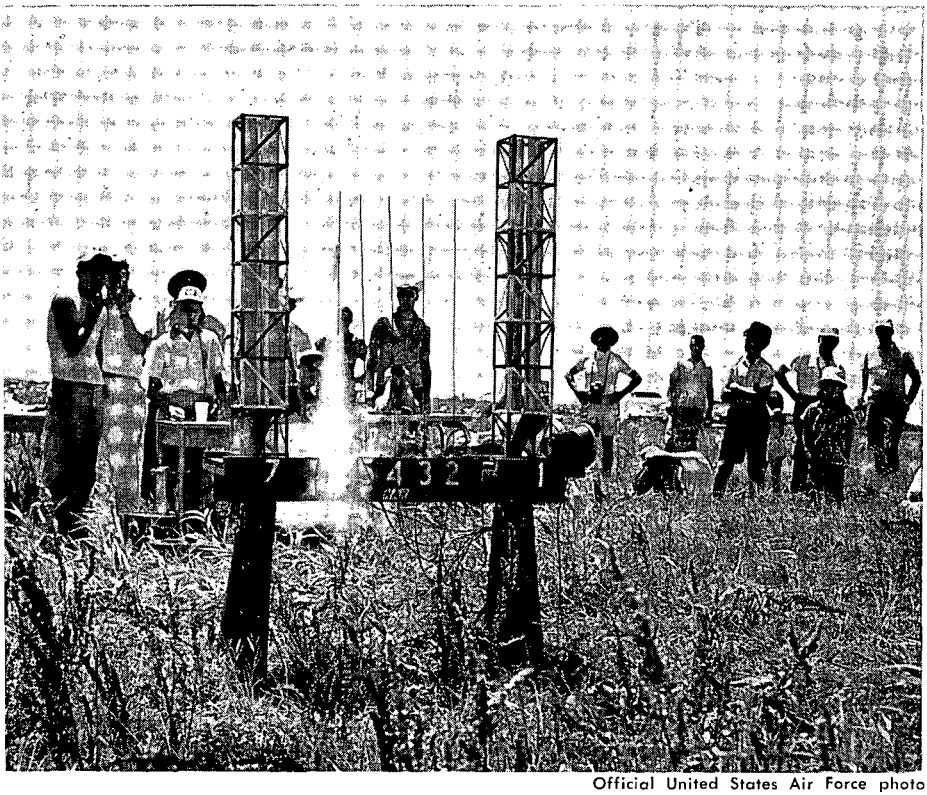

Official United States Air Force photo

Comparative accelerations of model rockets cannot be determined from single photographs of each flight unless the camera shutter is tripped at the same instant of launch both times and unless shutter speeds are known accurately. Compare the photographs on Page 83, taken at 1/500th of a second, with this one made at 1/1000th of a second by Air Force photographers at Langley Air Force base.

claimed altitude increase or the claimed stability improvement.

This essentially concludes the serious reporting aspects of these tests, but leads us to some interesting speculation regarding what might have caused Dr. Dudley to draw his conclusions. I repeat that this is strictly speculation. The NAR did not get the expected results. Why? What did we do wrong, or what did Dr. Dudley, in all scientific honesty, interpret incorrectly? None of us feel that we are competent to judge his overall

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theoretical work on the basis of the NAR tests; perhaps other tests in other areas may confirm all or part of it; perhaps it will have to be modified or even discarded. But that is up to the physicists; we are scientists on a busman's holiday, amateur scientists, and model rocketeers. Primarily, for this report and these tests, model rocketeers.

Dr. Dudley's photos showing the acceleration of his models at take-off mean nothing to us. Single photos can't. If the camera shutter had been tripped electronically by a micro-switch at the precise instant of launch, they would be interesting. But I can get and have gotten photos of take-offs which, if I laid them side by side, might indicate that one model had greater acceleration than the other. But there would be no way of knowing unless I had tripped the shutter at precisely the same instant of launch in each case.

A single-station tracking system can give very erroneous altitude readings . . . as we discovered in late 1957. The NAR initially used a single station system, began to question its accuracy, and went to a dual station system. I recall one particular design that consistently turned in 1,500-foot peak altitudes with the single-station system, but which began to give 500-foot altitudes once the two-station system was put into use.

A model rocket simply does not go straight up over the launcher every time. It may veer several degrees either side of vertical on the way up. In doing so, it may approach the tracking station or fly away from it. In the first instance, the peak altitude appears to be higher; in the second case, lower. Model rockets all have a tendency to weathercock into the wind slightly because of the fact that they are fin-stabilized vehicles possessing arrow stability.

If the tracking station is only three hundred feet away, and, if it happens to be up-wind of the launcher on the day of the flights, the vehicles will appear to go higher.

However, this does not answer the question of the higher altitudes that Dr. Dudley claimed for his coated models. We must look further into the problem. What happens if we compute the altitudes of the NAR test models using the one-station system?

The data from Flight #8 shows us what can be expected. The NAR tracking stations were 1,000 feet from the launch pad. Using this as

The United States Air Force has recently endorsed model rocketry and has designated the National Association of Rocketry as the Air Force's approved model rocket organization.

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the baseline, and using the 40° elevation angle recorded from one station for that flight, we compute an altitude of 839 feet. However, using two stations, this comes down to a reduced altitude of 635 feet.

This is still not enough to account for the altitude increases reported by Dr. Dudley.

At this time, we've checked everything we can think of with the thought that perhaps we did something wrong. The models were properly built according to the instructions given by Dr. Dudley. The launchers were grounded by wire to a steel fence post driven more than two feet into the ground. The weather was clear, cold, and dry, and the tests were made at high altitude.

Instead of concluding an argument, we may have started a new one: Who is right? When an amateur scientist does not confirm the results of another amateur scientist, who is going to be believed? The professional people will probably pay no attention . . . . or they would have run some tests themselves in the first place.

Since the NAR boys followed the instructions exactly, they certainly believe they are right. The essence of science is the predictable experiment done from a "cook book." Mystics use no cook books. Mysticism is based on faith. Did Dr. Dudley neglect to mention some important point or procedure in his article? If so, it was not proper scientific reporting.

Another interesting speculation raises its head: If the Electric Field Rocket Effect is real, why hasn't it been noticed before? Certainly with all the experiments and flight tests made with rockets, some factor should have shown up. Not all rocket flights are made from damp, sea-level locations. I recall standing on a desert hummock in freezing temperatures during winter flight tests from White Sands . . . at an elevation of nearly 4,000 feet. No unexplained factors turned up at White Sands during the time I was there. And, good friends, a metal rocket resting on a steel launching table bolted to a concrete slab is most certainly at ground potential!

And, perhaps the wrong question has been asked! Maybe the electric field rockets work best at *low* altitudes. If so, we will be finding this out about the time you are reading this, duplicating the experiment again on Long Island, New York in dry fall weather. If the eastern NAR groups confirm the Dudley experiments, you will most certainly hear about it.

In any event, it was time to make a report. To date, members of the NAR have *not* confirmed the results of Dr. Dudley's rocket tests. We invite you to come to your own conclusions.

THE END

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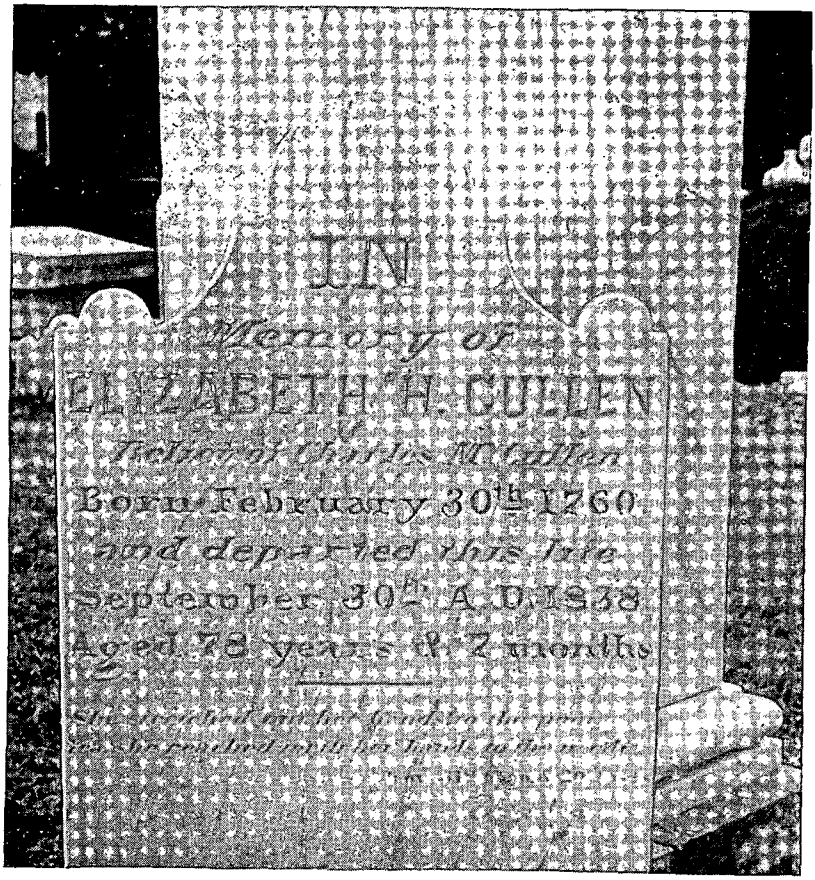
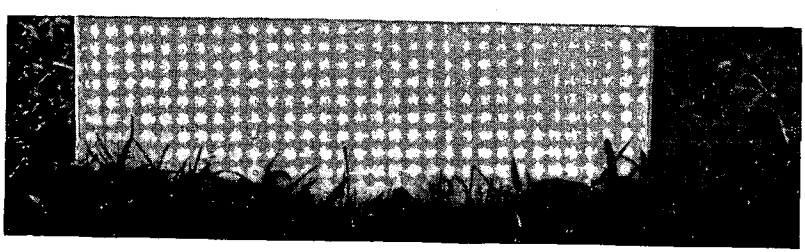


We must always accept the evidence of historical record?
Headstone in Lewes, Delaware
Ektachrome by Dr. John R. Pomeroy



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SENSE..

By HARRY HARRISON

Second of Three Parts. A deadly-harsh world, sentenced to death because of its viciously deadly masters . . . and an obligation to save it against its will!

Illustrated by van Dongen

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BRION BRANDD is the new Winner of Anvhar. To gain this title he has placed first in all of the events of the Twenties. The Twenties are a complex series of physical and mental contests that dominate the life of this unusual planet, far from Earth. Each year there is only a single Winner of Anvhar. The man who gains this honor is esteemed above all others, and is ensured of his place in history.

Yet Brion is not happy. He has been contacted by IHJEL, himself a former Winner, who seems to care nothing for the title Brion has just battled so hard to gain. Ihjel uses projective empathy to convince Brion that both of them will be needed to do a particular job—that of saving the entire planet of DIS from destruction. In explaining this, Ihjel reveals that he is a member of a little-known organization—the CULTURAL RELATIONSHIPS FOUNDATION. The C.R.F. works with the new science of Societics to guide the now isolated and disrupted planets that were originally settled by Earth. Many of them have been cut off and forgotten during the wars that followed the breakdown of the Earth empire.

The C.R.F. is vitally interested in the planet NYJORD, where the colonists have developed an unusual culture that has vitality without violence. Nyjord is threatened by the warlike and repellent people of Dis, who promise atomic destruction unless Nyjord surrenders to them. Dis, though weak and poorly armed, seems to be suicidally bent on destruction. Nyjord must either destroy or be destroyed—and either alternative means the death of her unique culture.

Ihjel and Brion are going to Dis, in an atempt to stop the war. They are joined by LEA MOREES, an Earth girl with degrees in exobiology and anthropology. Her assistance is sure to be needed in solving the problem of the Disans, who have made a massive adaptation to their inhospitable planet. Dis is so barren and savage that the native life forms have joined together in complicated types of symbiosis. In order to survive, the human settlers have been forced to take part in these symbiotic relationships. There are strong indications that Lea's knowledge will be needed to uncover the reasons for the Disan's apparently suicidal drives.

They land on the planet and meet disaster. Instead of a welcoming party there is an ambush. Ihjel is killed and their transportation destroyed. Brion and Lea are alone in the desert, without food and water, in a barren waste where the temperature exceeds one hundred thirty degrees

. . . OF OBLIGATION

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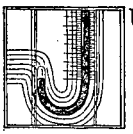
every day. Brion's resilient Anvharian physique adapts to the severe climate, but Lea succumbs to heat and shock.

There is no way to obtain water from the poisonous life forms. On the second day of carrying the girl, Brion is at the point of collapse. It is then that he meets a native Disan. Using his latent empathetic ability that Ihjel had trained, Brion recognizes that the Disan wishes to be friendly in spite of his hatred of offworlders. The Disan, Ulv, reluctantly gives them water, still suspicious. Yet he appears to desire peace as much as Brion does. He leaves them alone, but promises to send aid.

VIII



UST before sunset Brion heard clanking, and the throbbing whine of a sand car's engine coming from the west.

With each second the noise grew louder, coming their way. The tracks squeaked as the car turned around the rock spire, obviously seeking them out. A large carrier, big as a truck. It stopped before them in a cloud of its own dust and the driver kicked the door open.

"Get in here—and fast!" the man shouted. "You're letting in all the heat." He gunned the engine, ready to kick in the gears, looking at them irritatedly.

Ignoring the driver's nervous instructions, Brion carefully placed Lea on the rear seat before he pulled the door shut. The car surged forward instantly, a blast of icy air pouring from the air-cooling vents. It wasn't cold in the vehicle—but the temperature was at least forty degrees lower than the outer air. Brion covered Lea with all their extra clothing to prevent any further shock to her system. The driver, hunched over the wheel and driving with an intense speed, hadn't said a word to them since they had entered.

Brion looked up as another man stepped from the engine compartment in the rear of the car. He was thin, harried looking. Pointing a gun.

"Who are you," he said, without a trace of warmth in his voice.

It was a strange reception, but Brion was beginning to realize that Dis was a strange planet. He sat, relaxed and unmoving, keeping his voice pitched low. The other man chewed at his lip nervously and Brion didn't want to startle him into pulling the trigger.

"My name is Brandd. We landed from space two nights ago and have been walking in the desert ever since. Now don't get excited and shoot the gun when I tell you this—but both Vion and Ihjel are dead."

The man with the gun gasped; his eyes widened. The driver threw a single frightened look over his shoulder then turned quickly back to the wheel. Brion's probe had hit its mark. If these men weren't from the Cultural Relationships Foundation, they at least knew a lot about it. It seemed safe to assume they were C.R.F. men.

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"When they were shot the girl and I escaped. We were trying to reach the city and contact you. You are from the Foundation, aren't you?"

"Yes. Of course," the man said, lowering the gun. He stared glassy-eyed into space for a moment, nervously working his teeth against his lip. Startled at his own inattention he raised the gun again.

"If you're Brandd, there's something I want to know." Rummaging in his breast pocket with his free hand he brought out a yellow message form. He moved his lips as he reread the message. "Now answer me—if you can—what are the last three events in the"— he took a quick look at the paper again— "in the Twenties?"

"Chess finals, rifle prone position and fencing playoffs. Why?"

The man grunted and slid the pistol back into its holder, satisfied. "I'm Faussel," he said, and waved the message at Brion. "This is Ihjel's last will and testament, relayed to us by the Nyjord blockade control. He thought he was going to die and he sure was right. Passed on his job to you. You're in charge. I was Mervv's second-in-command, until he was poisoned. I was supposed to work for Ihjel and now I guess I'm yours. At least until tomorrow when we'll have everything packed and get off this hell planet?"

"What do you mean tomorrow?" Brion asked. "It's three days to deadline and we still have a job to do."

Faussel had dropped heavily into one of the seats and he sprang to his feet again, clutching the seat back to keep his balance in the swaying car.

"Three days, three weeks, three minutes—what difference does it make?" His voice rose shrilly with each word and he had to make a definite effort to master himself before he could go on. "Look. You don't know anything about this. You just came and that's your bad luck. My bad luck is being assigned to this death trap and watching the depraved and filthy things the natives do. And trying to be polite to them even when they are killing my friends, and those Nyjord bombers up there with their hands on the triggers. One of those bombardiers is going to start thinking about home and about the cobalt bombs down here and he's going to press that button—deadline or no deadline."

"Sit down, Faussel. Sit down and take a rest." There was sympathy in Brion's voice—but also the firmness of an order. Faussel swayed for a second longer, then collapsed. He sat with his cheek against the window, eyes closed. A pulse throbbed visibly in his temple and his lips worked. Under too much tension for too long a time.

This was the atmosphere that hung heavily in the air at the C.R.F. building when they arrived. Despair and defeat. The doctor was the only one who didn't share this mood as he bustled Lea off to the clinic with prompt efficiency. He obviously had enough patients to keep his mind occupied. With the others the feeling

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of depression was unmistakable. From the first instant they had driven through the automatic garage door Brion had swum in this miasma of defeat. It was omnipresent and hard to ignore.

As soon as he had eaten he went with Faussel into what was to have been Ihjel's office. Through the transparent walls he could see the staff packing the records, crating them for shipment. Faussel seemed less nervous now that he was no longer in command. Brion rejected any idea he had of letting the man know that he was only a green novice in the Foundation. He was going to need all the authority he could muster, since they would undoubtedly hate him for what he was going to do.

"Better take notes of this Faussel, and have it typed. I'll sign it." The printed words always carried the most authority. "All preparations for leaving are to be stopped at once. Records are to be returned to the files. We are going to stay here just as long as we have clearance from the Nyjorders. If this operation is unsuccessful, we will all leave together when the time expires. We will take whatever personal baggage we can carry by hand, everything else stays here. Perhaps you don't realize we are here to save a planet—not file cabinets full of papers." Out of the corner of his eye he saw Faussel flush, then angrily transcribe his notes. "As soon as that is typed bring it back. And all the reports as to what has been accomplished on this project. That will be all for now."

Faussel stamped out and a minute later Brion saw the shocked, angry looks from the workers in the outer office. Turning his back to them he opened the drawers in the desk, one after another. The top drawer was empty, except for a sealed envelope. It was addressed to Winner Ihjel.

Brion looked at it thoughtfully, then ripped it open. The letter inside was handwritten.

Ihjel:

I've had the official word that you are on the way to relieve me and I am forced to admit I feel only an intense satisfaction. You've had the experience on these outlaw planets and can get along with the odd types. I have been specializing in research for the last twenty years, and the only reason I was appointed planetary supervisor on Nyjord was because of the observation and application facilities. I'm the research type not the office type, no one has ever denied that.

You're going to have trouble with the staff, so you had better realize that they are all compulsory volunteers. Half are clerical people from my staff. The others a mixed bag of whoever was close enough to be pulled in on this crash assignment. It developed so fast we never saw it coming. And I'm afraid we've done little or nothing to stop it. We can't get access to the natives here, not in the slightest. It's frightening! *They don't fit! I've done Poisson Distributions on a dozen different factors and none of them can be equated. The*

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Pareto Extrapolations don't work. Our field men can't even talk to the natives and two have been killed trying. The ruling class is unapproachable and the rest just keep their mouths shut and walk away.

I'm going to take a chance and try to talk to Lig-magte, perhaps I can make him see sense. I doubt if it will work and there is a chance he will try violence with me, the nobility here are very prone to violence. If I get back all right, you won't see this note. Otherwise—good-by Ihjel, try to do a better job than I did.

Aston Mervv

P.S. There is a problem with the staff. They are supposed to be saviors but without exception they all loathe the Disans. I'm afraid I do, too.

Brion ticked off the relevant points in the letter. He had to find some way of discovering what Pareto Extrapolations were—without uncovering his own lack of knowledge. The staff would vanish in five minutes if they knew how green he was at the job. Poisson Distribution made more sense. It was used in physics as the unchanging probability of an event that would be true at all times. Such as the number of particles that would be given off by a lump radioactive matter during a short period. From the way Mervv used it in his letter it looked as if the Societics people had found measurable applications in societies and groups—at least on other planets. None of the rules seemed to be working on Dis. Ihjel had admitted that, and Mervv's death had proven it. Brion wondered who this Lig-magte was who appeared to have killed Mervv.

A forged cough broke through Brion's concentration, and he realized that Faussel had been standing in front of his desk for some minutes. When Brion looked up at the man he was mopping perspiration from his face.

"Your air conditioner seems to be out of order," he said. "Should I have the mechanic look at it?"

"There's nothing wrong with the machine, I'm just adapting to Dis climate. Anything else, Faussel?"

The assistant had a doubting look that he didn't succeed in hiding. He also had trouble believing the literal truth. He placed the small stack of file folders on the desk.

"These are the reports to date, everything we have uncovered about the Disans. It's not very much; however, considering the antisocial attitudes on this lousy world, it is the best we could do." A sudden thought hit him, and his eyes narrowed slyly. "It can't be helped, but some of the staff have been wondering out loud about that native that contacted us. How did you get him to help you? We've never gotten to first base with these people and as soon as you land you have one working for you. You can't stop people from thinking about it, you being a newcomer and a stranger. After all, it looks a little odd . . ." He broke off in mid-sentence as Brion looked up in cold fury.

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"I can't stop people from thinking about it—but I can stop them from talking. Our job is to contact the Disans and end this suicidal war. I have done more in one day than all of you have done since you arrived. I have accomplished this because I am better at my work than the rest of you. That is all the information any of you are going to receive. You are dismissed."

White with anger, Faussel turned on his heel and stamped out. Out to spread the word about what a slave-driver the new director was. They would then all hate him passionately which was just the way he wanted it. He couldn't risk exposure as the tyro he was. And perhaps a new emotion, other than disgust and defeat, might jar them into a little action. They certainly couldn't do any worse than they had been doing.

It was a frightening amount of responsibility. For the first time since setting foot on this barbaric planet Brion had time to stop and think. He was taking an awful lot upon himself. He knew nothing about this world, nor about the powers involved in the conflict. Here he sat pretending to be in charge of an organization he had first heard about only a few weeks earlier. It was a frightening situation. Should he slide out from under?

There was just one possible answer, and that was *no.* Until he found someone else who could do better, he seemed to be the one best suited for the job. And Ihjel's opinion had to count for something. Brion had felt the surety of the man's convictions that Brion was the only one who might possibly succeed in this difficult spot.

Let it go at that. If he had any qualms, it would be best to put them behind him. Aside from everything else there was a primary bit of loyalty involved. Ihjel had been an Anvharian and a Winner. Maybe it was a provincial attitude to hold in this great big universe—Anvhar was certainly far enough away from here—but honor is very important to a man who must stand alone. He had a debt to Ihjel and he was going to pay it off.

Once the decision had been made he felt easier. There was an intercom on the desk in front of him and he leaned with a heavy thumb on the button labeled *Faussel.*

"Yes?" Even through the speaker the man's voice was cold and efficient with ill-concealed hatred.

"Who is Lig-magte? And did the former director ever return from seeing him?"

"Magte is a title that means roughly noble or lord, Lig-magte is the local overlord. He has an ugly stoneheap of a building just outside the city. He seems to be the mouthpiece for the group of magter that are pushing this idiotic war. As to your second question I have to answer yes and no. We found Director Mervv's head outside the door next morning with all the skin gone. We knew it was him because the doctor identified the bridgework in his mouth. *Do you understand?"*

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All pretense of control had vanished and Faussel almost shrieked the last words. They were all close to cracking up, if he was any example. Brion broke in quickly.

"That will be all, Faussel. Just get word to the doctor that I would like to see him as soon as I can." He broke the connection and opened the first of the folders. By the time the doctor called he had skimmed the reports and was reading the relevant ones in greater detail. Putting on his warm coat he went through the outer office. The few workers still on duty turned their backs in frigid silence.

Dr. Stine had a pink and shiny bald head that rose above a thick black beard. Brion liked him at once. Anyone with enough firmness of mind to keep a beard in this climate was a pleasant exception after what he had met so far.

"How's the new patient, doctor?"

Stine combed his beard with stubby fingers before answering. "Diagnosis: heat-syncope. Prognosis: complete recovery. Condition fair, considering the dehydration and extensive sunburn. I've treated the burns and a saline drip is taking care of the other. She just missed going into heat-shock. I have her under sedation now."

"I'd like to have her up and helping me tomorrow morning. Could she do this—with stimulants or drugs?"

"She could—but I don't like it. There might be side factors, perhaps long-standing debilitation. It's a chance."

"A chance we will have to take. In less than seventy hours this planet is due for destruction. In attempting to avert that tragedy I'm expendable as is everyone else here. Agreed?"

The doctor grunted deep in his beard and looked Brion's immense frame up and down. "Agreed," he said, almost happily. "It is a distinct pleasure to see something beside black defeat around here. I'll go along with you."

"Well you can help me right now. I checked the personnel roster and discovered that out of the twenty-eight people working here there isn't a physical scientist of any kind—other than yourself."

"A scruffy bunch of button-pushers and theoreticians. Not worth a damn for field work, the whole bunch of them!" The doctor toed the floor switch on a waste receptacle and spat into it with feeling.

"Then I'm going to depend on you for some straight answers," Brion said. "This is an un-standard operation and the standard techniques just don't begin to make sense. Even Poisson Distributions and Pareto Extrapolations don't apply here." Stine nodded agreement and Brion relaxed a bit. He had just relieved himself of his entire knowledge of Societics and it had sounded authentic. "The more I look at it the more I believe that this is a physical problem, something to do with the exotic and massive adjustments the Disans have made to this hellish environment. Could this tie up in any way with their absolutely suicidal at-

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titude towards the cobalt bombs?"

"Could it? Could it?" Dr. Stine paced the floor rapidly on his stocky legs, twining his fingers behind his back. "You are bloody well right it could. Someone is thinking at last and not just punching bloody numbers into a machine and sitting and scratching while waiting for the screen to light up with the answers. Do you know how Disans exist?" Brion shook his head no. "The fools here think it disgusting, but I call it fascinating. They have found ways to join in a symbiotic relationship with the life forms on this planet. Even a parisitic relationship. You must realize that living organisms will do anything to survive. Castaways at sea will drink any liquid at all in their search for water. Disgust at this is only the attitude of the overprotected who have never experienced extreme thirst or hunger. Well, here on Dis you have a planet of castaways."

Stine opened the door of the pharmacy. "This talk of thirst makes me dry." With economically efficient motions he poured grain alcohol into a beaker, thinned it with distilled water and flavored it with some flavor crystals from a bottle. He filled two glasses and handed Brion one. It didn't taste bad at all.

How do you mean parasitic, doctor? Aren't we all parasites of the lower life forms? Meat animals, vegetables and such?"

"No, no—you miss the point! I speak of parasitic in the exact meaning of the word. You must realize that to a biologist there is no real difference between a parasitism, symbiosis, mutualism, biontergasy, commensalism—"

"Stop, stop!" Brion said. "Those are just meaningless sounds to me. If that is what makes this planet tick, I'm beginning to see why the rest of the staff has that lost feeling."

"It is just a matter of degree of the same thing. Look. You have a kind of crustacean living in the lakes here, very much like an ordinary crab. It has large claws in which it holds anemones, tentacled sea animals with no power of motion. The crustacean waves these around to gather food, and eats the pieces they capture that are too big for them. This is biontergasy, two creatures living and working together, yet each capable of existing alone. Now, this same crustacean has a parasite living under its shell, a degenerated form of a snail that has lost all powers of movement. A true parasite that takes food from its host's body and gives nothing in return. Inside this snail's gut there is a protozoan that lives off the snail's ingested food. Yet this little organism is not a parasite as you might think at first, but a symbiote. It takes food from the snail, but at the same time it secretes a chemical that aids the snail's digestion of the food. Do you get the picture? All these live forms exist in a complicated interpendence."

Brion frowned in concentration, sipping at the drink. "It's making some kind of sense now. Symbiosis,

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parasitism and all the rest are just ways of describing variations of the same basic process of living together. And there is probably a grading and shading between some of these that make the exact relationship hard to define."

"Precisely. Existence is so difficult on this world that the competing forms have almost died out. There are still a few left, preying off the others. It was the co-operating and interdependent life forms that really won out in the race for survival. I say life forms with intent; the creatures here are mostly a mixture of plant and animal, like the lichens you have elsewhere. The Disans have a creature they call a vaede that they use for water when traveling. It has rudimentary powers of motion from its animal part, yet uses photosynthesis and stores water like a plant. When the Disans drink from it the thing taps their blood streams for food elements."

"I know," Brion said wryly. "I drank from one. You can see my scars. I'm beginning to comprehend how the Disans fit into the physical pattern of their world, and I realize it must have all kinds of psychological

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effects on them. Do you think this has any effect on their social organization?"

"An important one. But maybe I'm making too many suppositions now, perhaps your researchers upstairs can tell you better, after all this is their field."

Brion had studied the reports on the social setup and not one word of them made sense. They were a solid maze of unknown symbols and cryptic charts. "Please continue, doctor," he insisted. "The Societics reports are valueless so far. There are factors missing. You are the only one I have talked to so far who can give me any intelligent reports or answers."

"All right then—be it on your own head. The way I see it you've got no society here at all, just a bunch of rugged individualists. Each one for himself, getting nourishment from the other life forms of the planet. If they have a society, it is orientated towards the rest of the planetary life—instead of towards other human beings. Perhaps that's why your figures don't make sense. They are set-up for human societies. In their relations with each other these people are completely different."

"What about the magter, the upper-class types who build castles and are causing all this trouble?"

"I have no explanation," Dr. Stine grumbled. "My theories hold water and seem logical enough up to this point. But the magter are the exception and I have no idea why. They are completely different from the rest of the Disans. Argumentative, blood-thirsty, looking for planetary conquest instead of peace. They aren't rulers, not in the real sense. They hold power because nobody else wants it. They grant mining concessions to offworlders because they are the only ones with a sense of property. Maybe I'm going out on a limb. But if you can find out *why* they are so different you may be onto the clue to our difficulties."

For the first time since his arrival Brion began to feel a touch of enthusiasm. Plus the remote possibility that there might even be a solution to the deadly problem. He drained his glass and stood up. "I hope you'll wake your patient early, doctor. You might be as interested in talking to her as I am. If what you told me is true, she could well be our key to the answer. Her name is Professor Lea Morees and she is just out from Earth with degrees in exobiology and anthropology, and has a head stuffed with vital facts."

"Wonderful!" Stine said. "I shall take care of the head not only because it is so pretty but because of its knowledge. Though we totter on the edge of atomic destruction I have a strange feeling of optimism—for the first time since I landed on this planet."

IX

The guard inside the front entrance of the Foundation building jumped at the thunderous noise and reached for his gun. He dropped his hand sheepishly when he realized it was only a sneeze—though a gargan-

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tuan one. Brion came up, sniffling, huddling down into his coat. "I'm going out before I catch pneumonia," he said. The guard saluted dumbly and after checking his proximity detector screens he turned off the light and opened the door. Brion slipped out and the heavy portal thudded shut behind him. The street was still warm from the heat of the day and he sighed happily and opened his coat.

This was partially a reconnaissance trip—and partly to get warmed up. There was little else he could do in the building, the staff had long since retired. He had slept himself, for half an hour, and now was refreshed and ready to work. All of the reports he could understand had been read and reread until they were memorized. He could use the time now, while the rest of them were asleep, to get better acquainted with the main city of Dis.

As he walked the dark streets he realized how alien the Disan way of life was to everything he knew. This city—Hovedstad—literally meant "main place" in the native language. And that's all it was. It was only the presence of the offworlders that made it into a city. Building after building, standing deserted, bore the names of mining companies, traders, space transporters. None of them were occupied now. Some still had lights burning, switched on by automatic apparatus, others were as dark as the Disan structures. There weren't many of these native constructions and they seemed out of place among the rammed earth and prefab offworld buildings. Brion examined one that was dimly illumined by the light on the corner of VEGAN SMELTERS, LTD.

It consisted of a single large room, resting flat on the ground. There were no windows and the whole thing appeared to have been constructed of some sort of woven material plastered with stone-hard mud. There was nothing blocking the door and he was thinking seriously of going in when he became aware that he was being followed.

It was only a slight noise, almost lost in the night. Normally it would never have been noticed, but tonight Brion was listening with his entire body. Someone was behind him, swallowed up in the pools of darkness. Brion shrank back against the wall. There was very little chance this could be anyone but a Disan. He had a sudden memory of Mervv's severed head as it had been discovered outside the door.

Ihjel had helped him train his empathetic sense and he reached out with it. It was difficult working in the dark, he could be sure of nothing. Was he getting a reaction—or just wishing for one? Why did it have a ring of familiarity to it. A sudden idea struck him.

"Ulv," he said, very softly. "This is Brion." He crouched, ready for any attack.

"I know," a voice said softly in the night. "Do not talk. Walk in the direction you were going before."

Asking questions now would ac-

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complish nothing. Brion turned instantly and did as he was bidden. The buildings grew farther apart until he realized from the sand underfoot that he was back in the planet-wide desert. It could be a trap—he hadn't recognized the voice behind the whisper—yet he still had to take this chance. A darker shape appeared in the dark night near him, and a burning hot hand touched his arm lightly.

"We can talk here." The words were louder and this time Brion recognized the voice. "I have brought you to the city as I told you I would. Have you done as you said you would?"

"I am doing it—but I need your help, Ulv. It is your life that needs saving and you must do your part—"

"What is truth?" Ulv interrupted. "All I hear is difference. The magter have done well though they live the wrong way. I myself have had bronze from them and there is water just for going. Now they tell us they are getting a different world for us all from the sky people and that is good, too. Your people are the essence of evil and there is no harm in killing them."

"Why didn't you kill me when you had the chance?"

"I could have. But there is something more important. What is truth? What is on the papers that fall from the sky?" He sighed once, deeply. "There are black marks on them that some can tell meaning from. What did the ship voices mean when they said that the magter were destroying the world and must be put down? I did not hear the voices, but I know one who did and he went to talk to Lig-magte which was foolish, because he was killed as he should have known he would be."

"The ships were telling you the truth, Ulv. The magter have bombs that will destroy Nyjord—the next planet—there." He pointed to the star newly rising in the east. "The bombs cannot be stopped. Unless the bombs are found or the magter drop their suicidal plans, this planet will burst into flame in three days time."

Ulv turned and started away. Brion called after him. "Wait. Will you help me stop this? How can I find you again?"

"I must think," the Disan answered still moving away. "I will find you."

He was gone. Brion shivered in the sudden chill of the air and wrapped the coat tighter around him. He started walking back towards the warmer streets of the city.

It was dawn when he reached the Foundation building; a new guard was at the front entrance. No amount of hammering or threats could convince the man to open until Faussel came down, yawning and blinking with sleep. He was starting some complaint when Brion cut him off curtly and ordered him to finish dressing and report for work at once. Still feeling elated he steamed into his office and cursed the overly-efficient character who had turned on his air conditioner to chill the room again. When he turned it off this time he removed enough of the vital parts

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to keep it out of order for the duration.

When Faussel came in he was still yawning behind his fist. Obviously a low morning-sugar type. "Before you fall on your face, go out and get some coffee," Brion said. "Two cups. I'll have a cup, too."

"That won't be necessary," Faussel said, drawing himself up stiffly. "I'll call the canteen if you wish some." He said it in the iciest tone he could manage this early in the morning.

In his enthusiasm Brion had forgotten the hate campaign he had directed against himself. "Suit yourself," he snapped, getting back into the role. "But the next time you yawn there'll be a negative entry in your service record. If that's clear—you can brief me on this organization's visible relations with the Disans. How do they take us?"

Faussel choked and swallowed a yawn. "I believe they look on the C.R.F. people as some species of simpleton, sir. They hate all offworlders, memory of their desertion has been passed on verbally for generations. So by their one-to-one logic we should either hate back or go away. We stay instead. And give them food, water, medicine and artifacts. Because of this they let us remain on sufferance. I imagine they consider us do-gooder idiots, and, as long as we cause no trouble, they'll let us stay." He was struggling miserably to suppress a yawn, so Brion turned his back and gave him a chance to get it out.

"What about the Nyjorders? How much do they know of our work?" Brion looked out the window at dusty buildings, outlined in purple against the violent colors of the desert sunrise.

"Nyjord is a co-operating planet, and has full knowledge at all executive levels. They are giving us all the aid they can."

"Well now is the time to ask for more. Can I contact the commander of the blockading fleet?"

"There is a scrambler connection right through to him. I'll set it up." Faussel bent over the desk and punched a number into the phone controls. The screen flowed with the black and white patterns of the scrambler.

"That's all, Faussel, I want privacy for this talk. What's the commander's name?"

"Professor Krafft, he's a physicist. They have no military men at all, so they called him in for the construction of the bombs and energy weapons. He's still in charge." Faussel yawned extravagantly as he went out the door.

The professor-commander was very old, with wispy gray hair and a network of wrinkles surrounding his eyes. His image shimmered then cleared as the scrambler units aligned.

"You must be Brion Brandd," he said. "I have to tell you how sorry we all are that your friend Ihjel—and the two others—had to die. After coming so far to help us. I'm sure you are very happy to have had a friend like that."

"Why . . . yes, of course," Brion

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said, reaching for the scattered fragments of his thought processes. It took an effort to remember the first conflict, now that he was worrying about the death of a planet. "Very kind of you to mention it. But I would like to find out a few things from you, if I could."

"Anything at all, we are at your disposal. Before we begin though, I shall pass on the thanks of our council for your aid in joining us. Even if we are eventually forced to drop the bombs, we shall never forget that your organization did everything possible to avert the disaster."

Once again Brion was caught off balance. For an instant he wondered if Krafft was being insincere, then recognized the baseness of this thought. The completeness of the man's humanity was obvious and compelling. The thought passed through Brion's mind that now he had an additional reason for wanting the war ended without destruction on either side. He very much wanted to visit Nyjord and see these people on their home grounds.

Professor Krafft waited, patiently and silently, while Brion pulled his thoughts together and answered. "I still hope that this thing can be stopped in time. That's what I wanted to talk to you about. I want to see Lig-magte and I thought it would be better if I had a legitimate reason. Are you in contact with him?"

Krafft shook his head. "No, not really in contact. When this trouble started I sent him a transceiver so we could talk directly. But he has delivered his ultimatum, speaking for the *magter*. The only terms he will hear are unconditional surrender. His receiver is on but he has said that is the only message he will answer."

"Not much chance of him ever being told that," Brion said.

"There was—at one time. I hope you realize Brion that the decision to bomb Dis was not easily arrived at. A great many people—myself included—vote for unconditional surrender. We lost the vote by a very small margin."

Brion was getting used to these philosophical body blows and he rolled with the punches now. "Are there any of your people left on this planet? Or do you have any troops I can call on for help? This is still a remote possibility, but, if I do find out where the bombs or the launcher are, a surprise raid would knock them out."

"We have no people left in Hovedstad now—all the ones who weren't evacuated were killed. But there are commando teams standing by here to make a landing if the weapons are detected. The Disans must depend on secrecy to protect their armament since we have both the manpower and the technology to reach any objective. We also have technicians and other volunteers looking for the weapon sites. They have not been successful as yet, and most of them were killed soon after landing." Krafft hesitated for a moment. "There is another group that you should know about, you will need all the

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factors. There are some of our people in the desert outside of Hovedstad. We do not officially approve of them, though they have a good deal of popular support. Mostly young men, operating as raiders, killing and destroying with very little compunction. They are attempting to uncover the weapons by sheer strength of arms."

This was the best news yet. Brion controlled his voice and kept his expression calm when he spoke. "I don't know how far I can stretch your co-operation—but could you possibly tell me how to contact them?"

Krafft allowed himself a small smile. "I'll give you the wave length on which you can reach their radio. They call themselves the 'Nyjord Army.' When you talk to them you can do me a favor. Pass on a message. Just to prove things aren't bad enough —they've become a little worse. One of our technical crews has detected jump-space energy transmissions in the planetary crust. The Disans are apparently testing their projector, sooner than we had estimated. Our deadline has been revised by one day. I'm afraid there are only two days left before you must evacuate." His eyes were large with compassion. "I'm sorry. I know this will make your job that much harder."

Brion didn't want to think about the loss of a full day from his already small deadline. "Have you told the Disans this as yet?"

"No," Krafft told him. "The decision was reached a few minutes before your call. It is going on the radio to Lig-magte now."

"Can you cancel the transmission and let me take the message in person?"

"I can do that," Krafft thought for a moment, "but it would surely mean your death at their hands. They have no hesitation in killing any of our people. I would prefer to send it by radio."

"If you do that, you will be interfering with my plans, and perhaps destroying them under the guise of saving my life. Isn't my life my own —to dispose of as I will?"

For the first time Professor Krafft was upset. "I'm sorry, terribly sorry. I'm letting my concern and worry wash over into my public affairs. Of course you may do as you please, I could never think of stopping you." He turned and said something inaudible offscreen. "The call is canceled. The responsibility is yours. All our wishes for success go with you. End of transmission."

"End of transmission," Brion said, and the screen went dark.

"Faussel!" he shouted into the intercom. "Get me the best and fastest sandcar we have, a driver who knows his way around and two men, who can handle a gun and know how to take orders. We're going to get some positive action at last."

X

"It's suicide," the taller guard grumbled.

"Mine not yours, so don't worry

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about it," Brion snapped at him. "Your job is to remember your orders and keep them straight. Now—let's hear them again."

The guard rolled his eyes up in silent rebellion and repeated in a toneless voice. "We stay here in the car and keep the motor running while you go inside the stone pile there. We don't let anybody in the car and we try and keep them clear of the car—short of shooting them that is. We don't come in no matter what happens or what it looks like, but wait for you here. Unless you call on the radio in which case we come in with the automatics going and shoot the place up and it doesn't matter who we hit. This will be used only as a last resort."

"See if you can't arrange that last resort thing if you can," the other guard said, patting the heavy blue barrel of his weapon.

"I meant that *last* resort," Brion said angrily. "If any guns go off without my permission, you will pay for it and pay with your necks. I want that clearly understood. You are here as a rear guard and a base for me to get back to. This is my operation and mine alone—unless I call you in. Understood?"

He waited until all three men had nodded in agreement, then checked the charge on his gun. Fully loaded. It would be foolish not to go in armed. But he had to. One gun wouldn't save him. He put it aside. The button radio on his collar was working and had a strong enough signal to get through any number of walls. He took off his coat, threw open the door and stepped out into the searing brilliance of the Disan noon.

There was only the desert silence, broken by the steady throb of the car's motor behind him. Stretching away to the horizon in every direction were the eternal deserts of sand. The keep stood nearby, solitary, a massive pile of black rocks. Brion plodded closer, watching for any motion from the walls. Nothing stirred. The high-walled, irregularly shaped construction sat in a ponderous silence. Brion was sweating now, only partially from the heat.

He circled the thing, looking for a gate. There wasn't one at ground level. A slanting cleft in the stone could be climbed easily, but it seemed incredible that this might be the only entrance. A complete circuit proved that it was. Brion looked unhappily at the slanting and broken ramp, then cupped his hands and shouted loudly.

"I'm coming up. Your radio doesn't work any more. I'm bringing the message from Nyjord that you have been waiting to hear." A slight bending of the truth without fracturing it. There was no answer. Just the hiss of wind-blown sand against the rock and the mutter of the car in the background. He started to climb.

The rock underfoot was crumbling and he had to watch where he put his feet. At the same time he fought a constant impulse to look up, watching for anything falling from above. Nothing happened. When he reached

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the top of the wall he was breathing hard, sweat moistened his body. There was still no one in sight. He stood on an unevenly shaped wall that appeared to circle the building. Instead of a courtyard inside it, the wall was the outer face of the structure, the domed roof rising from it. At varying intervals dark openings gave access to the interior. When Brion looked down the sandcar was just a dun-colored bump in the desert, already far behind him.

Stooping, he went through the nearest door. There was still no one in sight. The room inside was something out of a madman's funhouse. It was higher than it was wide, irregular, and more like a hallway than a room. At one end it merged into an incline that became a stairwell. The other ended in a hole that vanished in darkness below. Light of sorts filtered in through slots and holes drilled into the thick stone wall. Everything was built of the same crumble-textured but strong rock. Brion took the stairs. After a number of blind passages and wrong turns he saw a stronger light ahead. There was food, metal, even artifacts of the unusual Disan design in the different rooms he passed through. Yet no people. The light ahead grew stronger as he approached, the passageway opening and swelling out until it met the large central chamber.

This was the heart of the strange structure. All the rooms, passageways and halls existed just to give form to this gigantic hall. The walls rose sharply, the room circular in cross section and growing narrower towards the top. It was a truncated cone since there was no ceiling; a hot blue disk of sky cast light on the floor below.

On the floor stood a knot of men staring at Brion.

Out of the corner of his eyes, and with the very periphery of his consciousness, he was aware of the rest of the room. Barrels, stores, machinery, a radio transceiver, various bundles and heaps that made no sense at first glance. There was no time to look closer. Every fraction of his attention was focused on the muffled and hooded men.

He had found the enemy.

Everything that had happened to him so far on Dis had been preparation for this moment. The attack in the desert, the escape, the dreadful heat of sun and sand. All this had tempered and prepared him. It had been nothing in itself. Now the battle would begin in earnest.

None of this was conscious. His fighter's reflexes bent his shoulders, curved his hands before him as he walked softly in balance, ready to spring in any direction. Yet none of this was really necessary. All the danger so far was nonphysical. When he gave this thought conscious thought he stopped, startled. What was wrong here? None of the men had moved or made a sound. How could he even know they were men? They were so muffled and wrapped in cloth that only their eyes were exposed.

No doubt existed in Brion's mind.

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In spite of muffled cloth and silence he knew them for what they were. The eyes were empty of expression and unmoving, yet filled with the same negative emptiness as a bird of prey. They could look on life, death, and the rending of flesh with the same lack of interest and compassion. All this Brion knew in an instant of time, without words being spoken. Between the time he lifted one foot and walked a step he understood what he had to face. There could be no doubt, not to an empathetic.

From the group of silent men poured a frost-white wave of unemotion. An empathetic shares what other men feel. He gets his knowledge of their reaction by sensing lightly their emotions, the surges of interest, hate, love, fear, desire, the sweep of large and small sensations that accompany all thought and action. The empathetic is always aware of this constant and silent surge, whether he makes the effort to understand it or not. He is like a man glancing across the open pages of a tableful of books. He can see that the type, words, paragraphs, thoughts are there even without focusing his attention to understand any of it.

Then how does the man feel when he glances at the open books and sees only blank pages? The books are there—the words are not. He turns the pages of one, then others, flipping pages, searching for meaning. There is no meaning. All of the pages are blank.

This was the way in which the magter were blank, without emo-

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tions. There was a barely sensed surge and return that must have been neural impulses on a basic level. The automatic adjustments of nerve and muscle that keep an organism alive. Nothing more. Brion reached for other sensations and there was nothing there to grasp. Either these men were apparently without emotions or they were able to block them from his detection, it was impossible to tell which.

Very little time had passed in the objective world while Brion made these discoveries. The knot of men still looked at him, silent and unmoving. They weren't expectant, their attitude could not have been called interest. But he had come to them and now they waited to find out why. Any questions or statements they spoke would be redundant, so they didn't speak. The responsibility was his.

"I have come to talk with Lig-magte. Who is he?" Brion didn't like the tiny sound his voice made in the immense room.

One of the men gave a slight motion to draw attention to himself. None of the others moved. They still waited.

"I have a message for you," Brion said, talking slowly to fill the silence of the room and the emptiness of his thoughts. This had to be handled right. But what was right? "I'm from the Foundation in the city, as you undoubtedly know. I've been talking to the people on Nyjord. They have a message for you."

The silence grew longer. Brion had no intention of making this a monologue. He needed facts to operate, to form an opinion. Looking at the silent forms was telling him nothing. Time stretched taut and finally Lig-magte spoke.

"The Nyjorders are going to surrender."

It was an impossibly strange sentence. Brion had never realized before how much of the content of speech was made up of emotion. If the man had given it a positive emphasis, perhaps said it with enthusiasm, it would have meant, "Success! The enemy is going to surrender!" This wasn't the meaning.

With a rising inflection on the end it would have been a question. "Are they going to surrender?" It was neither of these. The sentence carried no other message than that contained in the simplest meanings of the separate words. It had intellectual connotations, but these could only be gained from past knowledge, not from the sound of the words. There was only one message they were prepared to receive from Nyjord. Therefore, Brion was bringing the message. If that was not the message Brion was bringing, the men here were not interested.

This was the vital fact. If they were not interested he could have no further value to them. Since he came from the enemy he was the enemy. Therefore, he would be killed. Because this was vital to his existence Brion took the time to follow the thought through. It made logical sense—and logic was all he could depend on now. He could be talking to

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robots or alien creatures for the amount of human response he was receiving.

"You can't win this war—all you can do is hurry your own deaths." He said this with as much conviction as he could, realizing at the same time that it was wasted effort. No flicker of response stirred in the men before him. "The Nyjorders know you have the cobalt bombs, and they have detected your jump-space projector. They can't take any more chances. They have pushed the deadline closer by an entire day. There are one and a half days left before the bombs fall and you are all destroyed. Do you realize what that means—"

"Is that the message?" Lig-magte asked.

"Yes," Brion said.

Two things saved his life then. He had guessed what would happen as soon as they had his message, though he hadn't been sure. But even the suspicion had put him on his guard. This, combined with the reflexes of a Winner of the Twenties, was barely enough to enable him to survive.

From frozen mobility Lig-magte had catapulted into headlong attack. As he leaped forward he drew a curved, double-edged blade from under his robes. It plunged unerringly through the spot where Brion's body had been an instant before.

There had been no time to tense his muscles and jump, just space to relax them and fall to one side. His reasoning mind joined the battle as he hit the floor. Lig-magte plunged by him, turning and bringing the knife down at the same time. Brion's foot lashed out and caught the other man's leg, sending him sprawling.

They were both on their feet at the same instant, facing each other. Brion now had his hands clasped before him in the unarmed man's best defense against a knife, the two arms protecting the body, the two hands joined to beat aside the knife arm from whichever direction it came. The Disan hunched low, flipped the knife quickly from hand to hand, then thrust it again at Brion's midriff.

Only by the merest fractional margin did Brion evade the attack for the second time. Lig-magte fought with complete violence. Every action was as intense as possible, deadly and thorough. There could be only one end to this unequal contest if Brion stayed on the defensive. The man with the knife had to win.

With the next change Brion changed tactics. He leaped inside the thrust, clutching for the knife arm. A burning slice of pain cut across his arm, then his fingers clutched the tendoned wrist. Clamped down hard, grinding shut, compressing with the tightening intensity of a closing vise.

It was all he could do to simply hold on. There was no science in it, just his greater strength from exercise and existence on a heavier planet. All of this strength went to his clutching hand, because he held his own life in that hand, forcing away the knife that wanted to terminate it forever. Nothing else mattered. Neither the frightening force

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of the knees that thudded into his body nor the hooked fingers that reached for his eyes to tear them out. He protected his face as well as he could, while the nails tore furrows through his flesh and the cut on his arm bled freely. These were only minor things to be endured. His life depended on the grasp of the fingers of his right hand.

There was a sudden immobility as he succeeded in clutching Lig-magte's other arm. It was a good grip and he could hold the arm immobilized. They had reached stasis, standing knee to knee, their faces only a few inches apart. The muffling cloth had fallen from the Disan's face during the struggle and empty, frigid eyes stared into Brion's. No flicker of emotion crossed the harsh planes of the other man's face. A great puckered white scar covered one cheek and pulled up a corner of the mouth in a cheerless grimace. It was false, there was still no expression here. Even when the pain must be growing more intense.

Brion was winning—if no one broke the impasse. His greater weight and strength counted now. The Disan would have to drop the knife before his arm was dislocated at the shoulder. He didn't do it. With sudden horror Brion realized that he wasn't going to drop it—no matter what happened.

A dull, hideous snap jerked through the Disan's body and the arm hung limp and dead. No expression crossed the other man's face. The knife was still locked in the fingers of the paralyzed hand. With his other hand Lig-magte reached across and started to pry the blade loose, ready to continue the battle one-handed. Brion raised his foot and kicked the knife free, sending it spinning across the room.

Lig-magte made a fist of his good hand and crashed it into Brion's body. He was still fighting, as if nothing had changed. Brion backed slowly away from the man. "Stop it," he said. "You can't win now. It's impossible." He called to the other men who were watching the unequal battle with expressionless immobility. No one answered him.

With a terrible sinking sensation Brion then realized what would happen and what he had to do. Lig-magte was as heedless of his own life as he was of the life of his planet. He would press the attack no matter what damage was done to him. Brion had an insane vision of him breaking the man's other arm, fracturing both his legs, and the limbless broken creature still coming forward. Crawling, rolling, teeth bared since they were the only remaining weapon.

There was only one way to end it. Brion feinted and the Lig-magte's arm moved clear of his body. The engulfing cloth was thin and through it Brion could see the outlines of the Disan's abdomen and rib cage. The clear location of the great nerve ganglion.

It was the death blow of kara-te. Brion had never used it on a man. In practice he had broken heavy boards, splintering them instantly

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with the short, precise stroke. The stiffened hand moving forward in a sudden surge, all the weight and energy of his body concentrated in his joined fingertips. Plunging deep into the other's flesh.

Killing, not by accident or in sudden anger. Killing because this was the only way the battle could possibly end.

Like a ruined tower of flesh the Disan crumpled and fell.

Dripping blood, exhausted, Brion stood over the body of Lig-magte and stared at the dead man's allies.

Death filled the room.

XI

Facing the silent Disans, Brion's thoughts hurtled about in sweeping circles. There would be no more than an instant's tick of time before the magter avenged themselves bloodily and completely. He felt a fleeting regret for not having brought his gun, then abandoned the thought. There was no time for regrets—what could he do NOW.

The silent watchers hadn't attacked instantly, and Brion realized that they couldn't be positive yet that Lig-magte had been killed. Only Brion knew the deadliness of that blow. Their lack of knowledge might buy him a little more time.

"Lig-magte is unconscious, but will revive quickly," Brion said, pointing at the huddled body. As the eyes turned automatically to follow his finger, he began walking slowly towards the exit. "I did not want to do this, but he forced me to, because he wouldn't listen to reason. Now I have something else to show you, something that I hoped it would not be necessary to reveal."

He was saying the first words that came into his head, trying to keep them distracted as long as possible. He must only appear to be going across the room, that was the feeling he must generate. There was even time to stop for a second and straighten his rumpled clothing and brush the sweat from his eyes. Talking easily, walking slowly towards the hall out of the chamber. He was halfway there when the spell broke and the rush began. One of the magter knelt and touched the body, and shouted a single word.

"Dead."

Brion hadn't waited for the official announcement. At the first movement of feet he dived headlong for the shelter of the exit. There was a spatter of tiny missiles on the wall next to him and he had a brief glimpse of raised blowguns before the wall intervened. He went up the dimly-lit stairs five at a time.

The pack was just behind him, voiceless and deadly. He could not gain on them—if anything they closed the distance as he pushed his already tired body to the utmost. There was no subtlety or trick he could use now, just straightforward flight back the way he had come. A single slip on the irregular steps and it would be all over.

There was someone ahead of him. If the woman had waited a few sec-

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onds more, he would certainly have been killed. But instead of slashing at him as he went by the doorway she made the mistake of rushing to the center of the stairs, the knife ready to impale him as he came up. Without slowing Brion fell onto his hands and easily dodged under the blow. As he passed he twisted and seized her around the waist, picking her from the ground.

When her legs lifted from under her the woman screamed—the first human sound Brion had heard in this human anthill. His pursuers were just behind him, and he hurled the woman into them with all his strength. They fell in a tangle and Brion used the precious seconds gained to reach the top of the building.

There must have been other stairs and exits because one of the magter stood between Brion and the way down out of this trap. Armed and ready to kill him if he tried to pass.

As he ran towards the executioner, Brion flicked on his collar radio and shouted into it. "I'm in trouble here, can you—"

The guards in the car must have been waiting for this message. Before he had finished there was the thud of a high-velocity slug hitting flesh and the Disan spun and fell, blood soaking his shoulder. Brion leaped over him and headed for the ramp.

"The next one is me—hold your fire!" he called.

Both guards must have had their telescopic sights zeroed on the spot. They let Brion pass, then threw in a hail of semiautomatic fire that tore chunks from the stone and screamed away in noisy ricochets. Brion didn't try to see if anyone was braving this hail of covering fire; he concentrated his energies on making as quick and erratic a descent as he could. Above the sounds of the firing he heard the car motor howl as it leaped forward. With their careful aim spoiled, the gunners switched to full automatic and unleashed a hailstorm of flying metal that bracketed the top of the tower.

"Cease . . . firing!" Brion gasped into the radio as he ran. The driver was good and timed his arrival with exactitude. The car reached the base of the tower at the same instant Brion did, and he burst through the door while it was sill moving. No orders were necessary. He fell headlong onto a seat as the car swung in a dust-raising turn and ground into high gear back to the city.

Reaching over carefully, the tall guard gently extracted a bit of pointed wood and fluff from a fold of Brion's pants. He cracked open the car door, and just as delicately threw it out.

"I knew that thing didn't touch you," he said, "since you are still among the living. They got a poison on those blowgun darts that takes all of twelve seconds to work. Lucky."

Lucky! Brion was beginning to realize just how lucky he was to be out of the trap alive. With information. Now that he knew more about the

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magter he shuddered at his innocence in walking alone and unarmed into the tower. Skill had helped him survive—but better than average luck had been necessary. Curiosity had gotten him in, brashness and speed had taken him out. He was exhausted, battered and bloody—but cheerfully happy. The facts about the magter were shaping themselves into a theory that might explain their attempt at racial suicide. It just needed a little time to be put into shape.

A pain cut across his arm and he jumped, startled, pieces of his thoughts crashing into ruin around him. The gunner had cracked the first aid box and was swabbing his arm with antiseptic. The knife wound was long, but not deep. Brion shivered while the bandage was going on, then quickly slipped into his coat. The air conditioner whined industriously, bringing down the temperature.

There was no attempt to follow the car. When the black tower had dropped over the horizon the guards relaxed, ran cleaning rods through their guns and compared marksmanship. All of their antagonism towards Brion was gone—they actually smiled at him. He had given them the first chance to shoot back since they had been on this planet.

The ride was uneventful and Brion was scarcely aware of it. A theory was taking form in his mind. It was radical, unusual and startling—yet it seemed to be the only one that fitted the facts. He pushed at it from all sides, but if there were any holes he couldn't find them. What it needed was dispassionate proving or disproving. There was only one person on Dis who was qualified to do this.

Lea was working in the lab when he came in, bent over a low-power binocular microscope. Something small, limbless and throbbing was on the slide. She glanced up when she heard his footsteps, smiling warmly when she recognized him. Fatigue and pain had drawn her face, her skin glistening with burn ointment, was chapped and peeling. "I must look a wreck," she said, putting the back of her hand to her cheek. "Something like a well-oiled and lightly cooked piece of beef." She lowered her arm suddenly and took his hand in both of hers. Her palms were warm and slightly moist.

"Thank you, Brion," was all she could say. Her society on Earth was highly civilized and sophisticated, able to discuss any topic without emotion and without embarrassment. This was fine in most circumstances, but made it difficult to thank a person for saving your life. However you tried to phrase it, it came out sounding like a last act speech from an historical play. There was no doubt, however, as to what she meant. Her eyes were large and dark, the pupils dilated by the drugs she had been given. They could not lie, nor could the emotions he sensed. He did not answer, just held her hand an instant longer.

"How do you feel?" he asked, concerned. His conscience twinged as he

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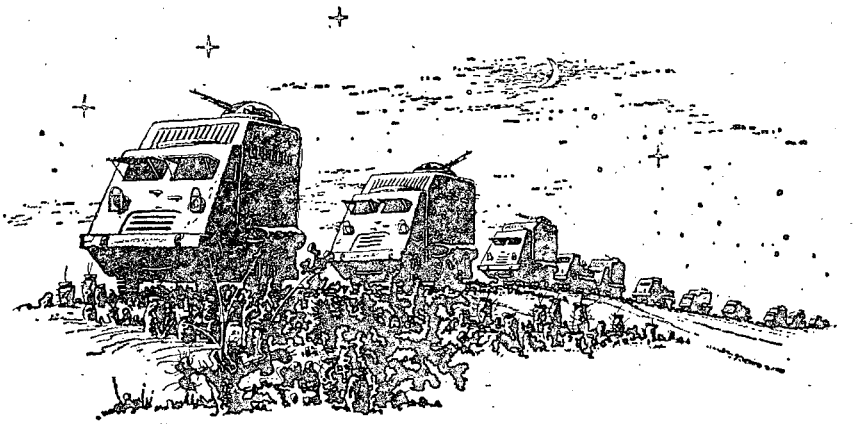
remembered that he was the one who had ordered her out of bed and back to work today.

"I should be feeling terrible," she said, with an airy wave of her hand. "But I'm walking on top of the world. I'm so loaded with pain-killers and



stimulants that I'm high as the moon. All the nerves to my feet feel turned off—it's like walking on two balls of fluff. Thanks for getting me out of that awful hospital and back to work."

Brion was suddenly ashamed of having driven her from her sick bed. "Don't be sorry!" Lea said, apparently reading his mind, but really seeing only his sudden drooped expression. "I'm feeling no pain. Honestly. I feel a little light-headed and foggy at times, nothing more. And this is the job I came here to do. In fact . . . well, it's almost impossible to tell you just how fascinating it all is! It was almost worth getting baked and parboiled for."

She swung back to the microscope, centering the specimen with a turn of the stage adjustment screw. "Poor Ihjel was right when he said this planet was exobiologically fascinating. This is a gastropod, a lot like *Odostomia,* but it has parasitical morphological changes so profound—"

"There's something else I remember," Brion said, interrupting her enthusiastic lecture, only half of which he could understand. "Didn't Ihjel also hope that you would give some study to the natives as well as their environment. The problem is with the Disans—not the local wild life."

"But I am studying them," Lea insisted. "The Disans have attained an incredibly advanced form of commensalism. Their lives are so intimately connected and integrated with the other life forms that they must be studied in relation to their environment. I doubt if they show as many external physical changes as little eating-foot *Odostomia* on the slide here, but there will surely be a number of

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psychological changes and adjustments that will crop up. One of these might be the explanation of their urge for planetary suicide."

"That may be true—but I don't think so," Brion said. "I went on a little expedition this morning and found something that has more immediate relevancy."

For the first time Lea became aware of his slightly battered condition. Her drug-grooved mind could only follow a single idea at a time and had overlooked the significance of the bandage and dirt.

"I've been visiting," Brion said, forestalling the question on her lips. "The magter are the ones who are responsible for causing the trouble, and I had to see them up close before I could make any decision. It wasn't a very pleasant thing, but I found out what I wanted to know. They are different in every way from the normal Disans. I've compared them. I've talked to Ulv—the native who saved us in the desert—and I can understand him. He is not like us in many ways—he would certainly have to be, living in this oven—but he is still undeniably human. He gave us drinking water when we needed it, then brought help. The magter, the upper-class lords of Dis, are the direct opposite. As cold-blooded and ruthless a bunch of murderers as you can possibly imagine. They tried to kill me when they met me, without reason. Their clothes, habits, dwellings, manners—everything about them differs from that of the normal Disan. More important, the magter are as coldly efficient and inhuman as a reptile. They have no emotions, no love, no hate, anger, fear—nothing. Each of them is a chilling bundle of thought processes and reactions, with all the emotions removed.

"Aren't you exaggerating?" Lea asked. "After all, you can't be sure. It might just be part of their training not to reveal any emotional state. Everyone must experience emotional states whether they like it or not."

"That's my main point. Everyone does—except the magter. I can't go into all the details now, so you'll just have to take my word for it. Even at the point of death they have no fear or hatred. It may sound impossible, but it is true."

Lea tried to shake the knots from her drug-hazed mind. "I'm dull today," she said, "you'll have to excuse me. If these rulers had no emotional responses, that might explain their present suicidal position. But an explanation like this raises more new problems than it supplies answers to the old ones. How did they get this way? It doesn't seem humanly possible to be without emotions."

"Just my point. Not *humanly* possible. I think these ruling class Disans aren't human at all, like the other Disans. I think they are alien creatures—robots or androids—anything except men. I think they are living in disguise among the normal human dwellers."

First Lea started to smile, then she changed her mind when she saw his face. "You are serious?" she asked.

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"Never more so. I realize it must sound as if I've had my brains bounced around too much this morning. Yet this is the only idea I can come up with that fits all of the facts. Look at the evidence yourself. One simple thing stands out clearly, and must be considered first if any theory is to hold up. That is the magters' complete indifference to death—their own or anyone else's. Is that normal to mankind?"

"No—but I can find a couple of explanations that I would rather explore first, before dragging in an alien life form. There may have been a mutation or an inherited disease that has deformed or warped their minds."

"Wouldn't that be sort of self-eliminating?" Brion asked. "Antisurvival? People who die before puberty would find it a little difficult to pass on a mutation to their children. But let's not beat this one point to death—it's the totality of these people that I find so hard to accept. Any one thing might be explained away, but not the collection of them. What about their complete lack of emotion? Or their manner of dress and their secrecy in general? The ordinary Disan wears a cloth kilt, while the magter cover themselves as completely as possible. They stay in their black towers and never go out except in groups. Their dead are always removed so they can't be examined. In every way they act like a race apart—and I think they are."

"Granted for the moment that this outlandish idea might be true, how did they get here? And why doesn't anyone know about it besides them?"

"Easily enough explained," Brion insisted. "There are no written records on this planet. After the breakdown, when the handful of survivors were just trying to exist here, the aliens could have landed and moved in. Any interference could have been wiped out. Once the population began to grow the invaders found they could keep control by staying separate, so their alien difference wouldn't be noticed."

"Why should that bother them?" Lea asked. "If they are so indifferent to death, they can't have any strong thoughts on public opinion or alien body odor. Why would they bother with such a complex camouflage? And if they arrived from another planet what has happened to the scientific ability that brought them here?"

"Peace," Brion said. "I don't know enough to even be able to guess at answers to half those questions. I'm just trying to fit a theory to the facts. And the facts are clear. The magter are so inhuman they would give me nightmares—if I were sleeping these days. What we need is more evidence."

"Then get it," Lea said with finality. "I'm not telling you to turn murderer—but you might try a bit of grave-digging. Give me a scalpel and one of your fiends stretched out on a slab and I'll quickly tell you what he is or is not." She turned back to the microscope and bent over the eyepiece.

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That was really the only way to hack the Gordion knot. Dis had only thirty-six more hours to live, so individual deaths shouldn't be of any concern. He had to find a dead magter, and if none were obtainable in the proper condition he had to violently get one of them that way. For a planetary savior he was personally doing in an awful lot of the citizenry. He stood behind Lea, looking down at her thoughtfully while she worked. The back of her neck was turned up to him, lightly covered with gently curling hair. With one of the about-face shifts the mind is capable of his thoughts flipped from death to life, and he experienced a strong desire to lightly caress this spot, to feel the yielding texture of female flesh . . .

Plunging his hands deep into his pockets he walked quickly to the door. "Get some rest soon," he called to her. "I doubt if those bugs will give you the answer. I'm going now to see if I can get the full-sized specimen you want."

"The truth could be anywhere, I'll stay on these until you come back," she said, not looking up from the microscope.

Up under the roof was a well-equipped communications room. Brion had taken a quick look at it when he had first toured the building. The duty operator had earphones on—though only one of the phones covered an ear—and was monitoring through the bands. His shoeless feet were on the edge of the table and he was eating a thick sandwich with his free hand. His eyes bugged when he saw Brion in the doorway and he jumped into a flurry of action.

"Hold the pose," Brion told him, "it doesn't bother me. And if you make any sudden moves you are liable to break a phone, electrocute yourself or choke to death. Just see if you can set the transceiver on this frequency for me." Brion wrote the number on a scratchpad and slid it over to the operator. It was the frequency Professor-commander Krafft had given him, for the radio of the illegal terrorists—the Nyjord army.

The operator plugged in a handset and gave it to Brion. "Circuit open," he mumbled around a mouthful of still unswallowed sandwich.

"This is Brandd, director of the C.R.F. Come in please." He went on repeating this for more than ten minutes before he got an answer.

"What do you want?"

"I have a message of vital urgency for you—and I would also like your help. Do you want any more information on the radio?"

"No. Wait there—we'll get in touch with you after dark." The carrier wave went dead.

Thirty-five hours to the end of the world—and all he could do was wait.

XII

On Brion's desk when he came in, were two neat piles of paper. As he sat down and reached for them he was conscious of an arctic coldness in the air, a frigid blast. It was coming from the air-conditioner grille

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which was now covered by welded steel bars. The control unit was sealed shut. Someone was either being very funny or very efficient. Either way it was cold. Brion kicked at the cover plate until it buckled, then bent it aside. After a careful look into the interior he disconnected one wire and shorted it to another. He was rewarded by a number of sputtering cracks and a good quantity of smoke. The compressor moaned and expired.

Faussel was standing in the door with more papers and a shocked expression. "What do you have there?" Brion asked. Faussel managed to straighten out his face and brought the folders to the desk, arranging them on the piles already there.

"These are the progress reports you asked for, from all units. Details to date, conclusions, suggestions, et cetera."

"And the other pile?" Brion pointed.

"Offplanet correspondence, commissary invoices, requisitions," he straightened the edges of the stack while he answered. "Daily report, hospital log—" His voice died away and stopped as Brion carefully pushed the stack off the edge of the desk into the wastebasket.

"In other words, red tape," Brion said. "Well it's all filed."

One by one the progress reports followed the first stack into the basket, until his desk was clear. Nothing. It was just what he had expected. But there had always been the off-chance that one of the specialists could come up with a new approach. They hadn't, they were all too busy specializing.

Outside the sky was darkening. The front entrance guard had been told to let in anyone who came asking for the director. There was nothing else Brion could do until the Nyjord rebels made contact. Irritation bit at him. At least Lea was doing something constructive, he could look in on her.

He opened the door to the lab with a feeling of pleasant anticipation. It froze and shattered instantly. Her microscope was hooded and she was gone. *She's having dinner,* he thought, *or—she's in the hospital.* The hospital was on the floor below and he went there first.

"Of course she's here!" Dr. Stine grumbled. "Where else should a girl in her condition be? She was out of bed long enough today. Tomorrow's the last day, and if you want to get any more work out of her before the deadline, you had better let her rest tonight. Better let the whole staff rest. I've been handing out tranquilizers like aspirin all day. They're falling apart."

"The world's falling apart. How is Lea doing?"

"Considering her shape she's fine. Go in and see for yourself if you won't take my word for it. I have other patients to look at."

"Are you that worried, doctor?"

"Of course I am! I'm just as prone to the ills of the flesh as the rest of you. We're sitting on a ticking bomb and I don't like it. I'll do my job as

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long as it is necessary, but I'll also be glad to see the ships land to pull us out. The only skin that I really feel emotionally concerned about right now is my own. And if you want to be let in on a public secret—the rest of your staff feels the same way. So don't look forward to too much efficiency."

"I never did," Brion said.

Lea's room was dark, illuminated only by the light of Dis' moon slanting in the window. Brion let himself in and closed the door behind him. Walking quietly he went over to the bed. She was sleeping soundly, her breathing gentle and regular. A night's sleep now would do as much good as all the medication.

He should have gone then, instead he sat down in the chair placed next to the head of the bed. The guards knew where he was, he could wait here just as well as any place else.

It was a stolen moment of peace on a world at the brink of destruction. He was grateful for it. Everything looked less harsh in the moonlight and he rubbed some of the tension from his eyes. Lea's face was ironed smooth by the light, beautiful and young; a direct contrast to everything else on this poisonous world. Her hand was outside of the covers and he took it in his own, obeying a sudden impulse. Looking out of the window at the desert in the distance, he let the peace wash over him, forcing himself to forget for the moment that in one more day life would be stripped from this planet.

Later, when he looked back at Lea he saw that her eyes were open, though she hadn't moved. How long had she been awake? He jerked his hand away from hers, feeling suddenly guilty.

"Is the boss-man looking after the serfs, to see if they're fit for the treadmill in the morning?" she asked. It was the kind of remark she had used with such frequency in the ship, though it didn't sound quite as harsh now. And she was smiling. Yet it reminded him too well of her superior attitude towards rubes from the stellar sticks. Here he might be the director, but on ancient Earth he would be only one more gaping yokel.

"How do you feel?" he asked, realizing and hating the triteness of the words, even as he said them.

"Terrible. I'll be dead by morning. Reach me a piece of fruit from that bowl, will you? My mouth tastes like an old boot heel. Wonder how fresh fruit ever got here? Probably a gift to the working classes from the smiling planetary-murderers on Nyjord." she took the apple Brion gave her and bit into it. "Did you ever think of going to Earth?"

Brion was startled, this was too close to his own thoughts about planetary backgrounds. There couldn't possibly be a connection though. "Never," he told her. "Up until a few months ago I never even considered leaving Anvhar. The Twenties are such a big thing at home that it is hard to imagine that anything else exists while you are still taking part in them."

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"Spare me the Twenties," she pleaded. "After listening to you and Ihjel I know far more about them than I shall ever care to know. But what about Anvhar itself? Do you have big city-states like Earth?"

"Nothing like that. For its size it has a very small population. No big cities at all. I guess the largest centers of population are around the schools, packing plants, things like that."

"Any exobiologists there?" Lea asked, with a woman's eternal ability to make any general topic personal.

"At the universities, I suppose, though I wouldn't know for sure. And you must realize that when I say no big cities, I also mean no little cities. We aren't organized that way at all. I imagine the basic physical unit is family and the circle of friends. Friends get important quickly since the family breaks up when children are still relatively young. Something in the genes I suppose, we all enjoy being alone. Suppose you might call it an inbred survival trait."

"Up to a point," she said, biting delicately into the apple. "Carry that sort of thing too far and you end up with no population at all. A certain amount of proximity is necessary for that."

"Of course there is. And there must be some form of recognized relationship or control—that or complete promiscuity. On Anvhar the emphasis is on personal responsibility, and that seems to take care of the problem. If we didn't have an adult way of looking at . . . things, our kind of life would be impossible. Individuals are brought together either by accident or design, and with this proximity must be some certainty of relations—"

"You're losing me," Lea protested. "Either I'm still foggy from the dope or you are suddenly unable to speak a word of less than four syllables in length. You know—whenever this happens with you I get the distinct impression that you are trying to cover up something. For Occam's sake be specific! Bring together two of these hypothetical individuals and tell me what happens."

Brion took a deep breath. He was in over his head and far from shore. "Well—take a bachelor like myself. Since I like cross-country skiing I make my home in this big house our family has, right at the edge of the Broken Hills. In summer I looked after a drumtum herd, but after slaughtering my time was my own all winter. I did a lot of skiing, and used to work for the Twenties. Sometimes I would go visiting. Then again, people would drop in on me—houses are few and far between on Anvhar. We don't even have locks on our front doors. You accept and give hospitality without qualification. Whoever comes. Male—female—in groups or just traveling alone—"

"I get the drift. Life must be dull for a single girl on your iceberg planet, she must surely have to stay home a lot."

"Only if she wants to. Otherwise she can go wherever she wishes and

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be welcomed as another individual. I suppose it is out of fashion in the rest of the galaxy—and would probably raise a big laugh on Earth—but a platonic, disinterested friendship between man and woman is an accepted thing on Anvhar."

"Sounds exceedingly dull. If you are all such cool and distant friends, what keeps your birthrate going?"

Brion felt his ears flushing, not quite sure if he was being teased or not. "There are plenty of happy marriages. But it is up to the woman always to indicate if she is interested in a man. A girl who isn't interested won't get any proposals. I imagine this is a lot different from other planets—but so is our world. The system works well enough for us."

"Just about the opposite of Earth," Lea told him, dropping the apple core into a dish and carefully licking the tips of her fingers. "I guess you Anvharians would describe Earth as a planetary hotbed of sin. The reverse of your system, and going full blast all the time. There are far too many people there for comfort. Birth control came late and is still being fought—if you can possibly imagine that. There are just too many crackbrained ideas that have been long entrenched in custom. The world's overcrowded. Men, women, children, a boiling mob wherever you look. And all of the physically mature ones seem to be involved in the Great Game of Love. The male is always the aggressor, and women take the most outrageous kinds of flattery for granted. At parties there are always a couple of hot breaths of passion fanning your neck. A girl has to keep her spike heels filed sharp."

"She has to *what—?*"

"A figure of speech, Brion. Meaning you fight back all the time, if you don't want to be washed under by the flood."

"Sounds rather"— Brion weighed the word before he said it, but could find none other suitable—"repellent."

"From your point of view, it would be. I'm afraid we get so used to it that we even take it for granted. Sociologically speaking—" She stopped and looked at Brion's straight back and almost rigid posture. Her eyes widened and her mouth opened in an unspoken *oh* of sudden realization.

"I'm being a fool," she said. "You weren't speaking generally at all! You had a very specific subject in mind. Namely *me!*"

"Please, Lea, you must understand —"

"But I do!" she laughed. "All the time I thought you were being a frigid and hard-hearted lump of ice, you were really being very sweet. Just playing the game in good old Anvharian style. Waiting for a sign from me. We'd still be playing by different rules if you hadn't had more sense than I, and finally realized that somewhere along the line we must have got our signals mixed. And I thought you were some kind of frosty offworld celibate." She let her hand go out and her fingers rustled through his hair. Something she had been wanting to do for a long time.

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"I had to," he said, trying to ignore the light touch of her fingers. "Because I thought so much of you, I couldn't have done anything to insult you. Until I began to worry where the insult would lie, since I knew nothing about your planet's mores."

"Well you know now," she said very softly. "The men aggress. Now that I understand, I think I like your way better. But I'm still not sure of all the rules. Do I explain that yes, Brion, I like you so very much? You are more man, in one great big wide shouldered lump, than I have ever met before—"

His arms were around her, holding her to him, and their lips sought each other's in the darkness.

XIII

"He wouldn't come in, sir. Just hammered on the door and said, *I'm here, tell Brandd.*"

"Good enough," Brion said, seating his gun in the holster and sliding the extra clips into his pocket. "I'm going out now, and I should return before dawn. Get one of the wheeled stretchers down here from the hospital. I'll want it waiting when I get back."

Outside the street was darker than he remembered. Brion frowned and his hand moved towards his gun. Someone had put all the nearby lights out of commission. There was just enough illumination from the stars to enable him to make out the dark bulk of a sandcar.

The motor roared as soon as he had closed the door. Without lights the sandcar churned a path through the city and out into the desert. Though the speed picked up, the driver still drove in the dark, feeling his way with a light touch on the controls. The ground rose, and when they reached the top of a flat mesa he killed the engine. Neither the driver nor Brion had spoken a word since they left.

A switch snapped and the instrument lights came on. In their dim glow Brion could just make out the other man's hawklike profile. When he moved Brion saw that his figure was cruelly shortened. Either accident or a mutated gene had warped his spine, hunching him forward in eternally bent supplication. Warped bodies are rare—his was the first Brion had ever seen. He wondered what series of events had kept him from medical attention all his life. This might explain the bitterness and pain in the man's voice.

"Did the mighty brains on Nyjord bother to tell you that they have chopped another day off the deadline? That this world is about to come to an end?"

"Yes, I know," Brion said. "That's why I'm asking your group for help. Our time is running out too fast."

The man didn't answer, merely grunted and gave his full attention to the radar pings and glowing screen. The electronic senses reached out as he made a check on all the search frequencies to see if they were being followed.

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"Where are we going?" Brion asked.

"Out into the desert," the driver made a vague wave of his hand. "Headquarters of the army. Since the whole thing will be blown up in another day, I guess I can tell you it's the only camp we have. All the cars, men and weapons are based there. And Hys. He's the man in charge. Tomorrow it will be all gone—along with this cursed planet. What's your business with us?"

"Shouldn't I be telling Hys that?"

"Suit yourself." Satisfied with the instrument search the driver kicked the car to life again and churned on across the desert. "But we're a volunteer army and we have no secrets from each other. Just from the fools at home who are going to kill this world." There was a bitterness in his words that he made no attempt to conceal. "They fought among themselves and put off a firm decision so long that now they are forced to commit murder."

"From what I had heard, I thought that it was the other way around. They call your Nyjord Army terrorists."

"We are. Because we are an army and we're at war. The idealists at home only understood that when it was too late. If they had backed us in the beginning, we would have blown open every black castle on Dis—searched until we found those bombs. But that would have meant wanton destruction and death. They wouldn't consider that. Now they are going to kill everyone, destroy everything." He flicked on the panel lights just long enough to take a compass bearing, and Brion saw the tortured unhappiness in his twisted body.

"It's not over yet," Brion said. "There is more than a day left, and I think I'm onto something that might stop the war—without any bombs being dropped."

"You're in charge of the Cultural Relationships Free Bread and Blankets Foundation, aren't you? What good can your bunch do when the shooting starts?"

"None. But maybe we can put off the shooting. If you are trying to insult me—don't bother. My irritation quotient is very high."

The driver just grunted at this, slowing down as they ran through a field of broken rock. "What is it you want?" he asked.

"We want to make a detailed examination of one of the magter. Alive or dead, it doesn't make any difference. You wouldn't happen to have one around?"

"No. We've fought with them often enough, but always on their home grounds. They keep all their casualties, and a good number of ours. What good will it do you anyway? A dead one won't tell you where the bombs or the jump-space projector is."

"I don't see why I should explain that to you—unless you are in charge. You are Hys, aren't you?"

The driver grunted angrily and was silent while he drove. Finally he asked, "What makes you think that?"

"Call it a hunch. You don't act very

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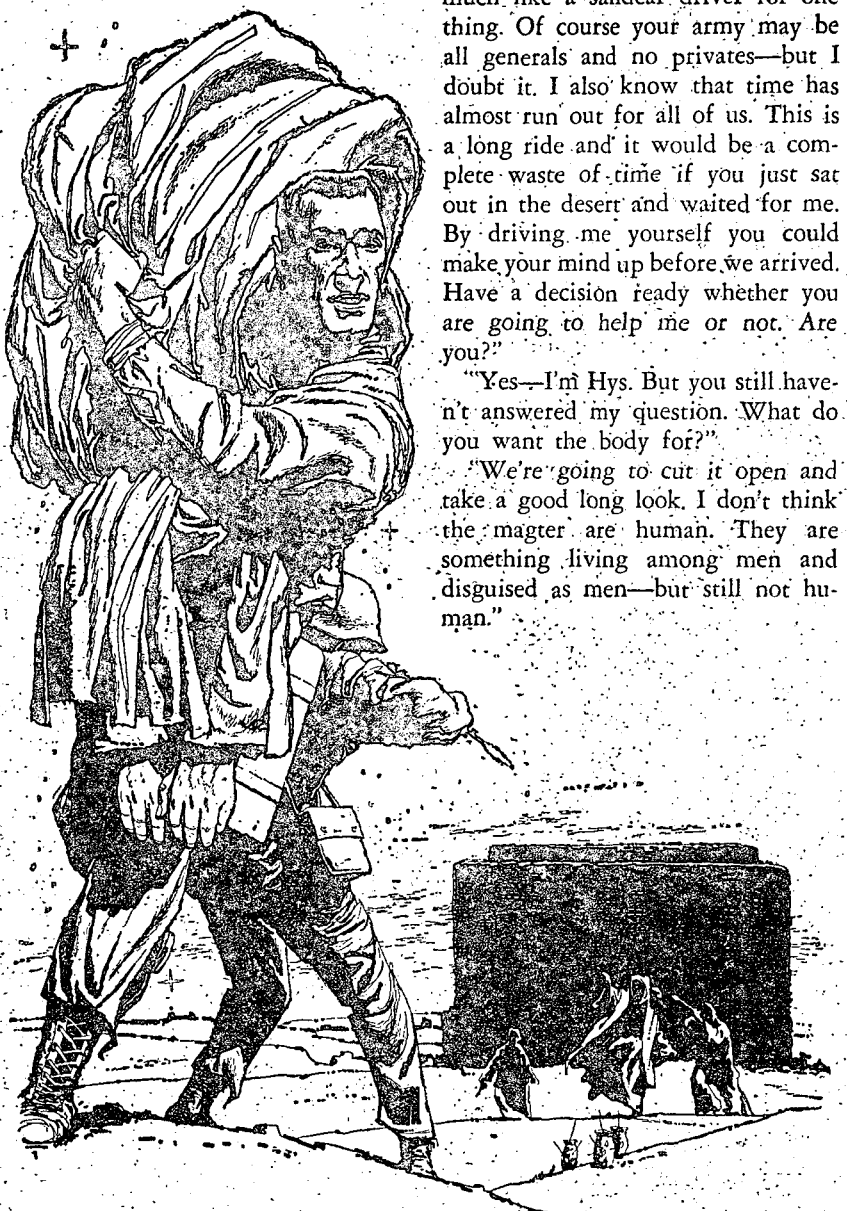

much like a sandcar driver for one thing. Of course your army may be all generals and no privates—but I doubt it. I also know that time has almost run out for all of us. This is a long ride and it would be a complete waste of time if you just sat out in the desert and waited for me. By driving me yourself you could make your mind up before we arrived. Have a decision ready whether you are going to help me or not. Are you?"

"Yes—I'm Hys. But you still haven't answered my question. What do you want the body for?"

"We're going to cut it open and take a good long look. I don't think the magter are human. They are something living among men and disguised as men—but still not human."

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"Secret aliens?" Hys exploded the words in a mixture of surprise and disgust.

"Perhaps. The examination will tell us that."

"You're either stupid or incompetent," Hys said bitterly. "The heat of Dis has cooked your brains in your head. I'll be no part of this kind of absurd plan."

"You must," Brion said, surprised at his own calmness. He could sense the other man's interest hidden behind his insulting manner. "I don't even have to give you my reasons. In another day this world ends and you have no way to stop it. I just might have an idea that could work and you can't afford to take any chances—not if you are really sincere. Either you are a murderer, killing Disans for pleasure, or you honestly want to stop the war. Which is it?"

"You'll have your body all right," Hys grated, hurling the car viciously around a spire of rock. "Not that it will accomplish anything—but I can find no fault in killing another magter. We can fit your operation into our plans without any trouble. This is the last night and I have sent every one of my teams out on raids. We're breaking into as many magter towers as possible before dawn. There is a slim chance that we might uncover something. It's really just shooting in the dark, but it's all we can do now. My own team is waiting and you can ride along with us. The others left earlier. We're going to hit a small tower on this side of the city. We raided it once before and captured a lot of small arms that they had stored there. There is a good chance that they may have been stupid enough to store something there again. Sometimes the magter seem to suffer from a complete lack of imagination."

"You have no idea just how right you are," Brion told him.

The sandcar slowed down now, as they approached a slab-sided mesa that rose vertically from the desert. They crunched across broken rocks, leaving no tracks. A light blinked on the dashboard and Hys stopped instantly and killed the engine. They climbed out, stretching and shivering in the cold desert night.

It was dark walking in the shadow of the cliff and they had to feel their way along a path through the tumbled boulders. A sudden blaze of light made Brion wince and shield his eyes. Near him, on the ground, was the humming shape of a cancellation projector, sending out a fan-shaped curtain of vibration that absorbed all the light rays falling upon it. This incredible blackness made a lightproof wall for the recessed hollow at the foot of the cliff. In this shelter, under the overhang of rock, were three open sandcars. They were large and armor-plated, warlike in their scarred gray paint. Men sprawled, talked and polished their weapons. Everything stopped when Hys and Brion appeared.

"Load up," Hys called out. "We're going to attack now, same plan I outlined earlier. Get Telt over here." Talking to his own men some of the

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harshness was gone from his voice. The tall soldiers of Nyjord moved in ready obedience to their commander. They loomed over his bent figure, most of them twice as tall as him. Yet there was no hesitation in jumping when he commanded. They were the body of the Nyjord striking force —he was the brains.

A square-cut, compact man rolled up to Hys and saluted with a leisurely flick of his hand. He was weighted and slung about with packs and electronic instruments. His pockets bulged with small tools.

"This is Telt," Hys said to Brion, "he'll take care of you. Telt's my personal technical squad. Goes along on all my operations with his meters to test the interiors of the Disan forts. So far he's found no trace of a jump-space generator, or excess radioactivity that might indicate a bomb. Since he's useless and you're useless, you can both take care of each other. Use the car we came in."

Telt's wide face split in a frog-like grin, his voice was hoarse and throaty. "Wait. Just wait! Some day those needles gonna flicker and all our troubles be over. What you want me to do with the stranger?"

"Supply him with a corpse—one of the magter," Hys said. "Take it wherever he wants and then report back here." Hys scowled at Telt. "Some day your needles will flicker! Poor fool—this is the last day." He turned away and waved the men into their sandcars.

"He likes me," Telt said, attaching a final piece of equipment. "You can tell because he calls me names like that. He's a great man, Hys is, but they never found out until it was too late. Hand me that meter, will you?"

Brion followed the technician out to the car and helped him load his equipment aboard. When the larger cars appeared out of the darkness, Telt swung around after them. They snaked forward in a single line through the rocks, until they came to the desert of rolling sand dunes. Then they spread out in line abreast and rushed towards their goal.

Telt hummed to himself hoarsely as he drove. He broke off suddenly and looked at Brion. "What you want the dead Dis for?"

"A theory," Brion answered sluggishly. He had been half napping in the chair, taking the opportunity for some rest before the attack. "I'm still looking for a way to avert the end."

"You and Hys," Telt said with satisfaction. "Couple of idealists. Trying to stop a war you didn't start. They never would listen to Hys. He told them in the beginning exactly what would happen, and he was right. They always thought his ideas were crooked, like him. Growing up alone in the hill camp, with his back too twisted and too old to be fixed when he finally did come out. Ideas twisted the same way. Made himself an authority on war. Hah! War on Nyjord. That's like being an icecube specialist in hell. But he knew all about it, but they never would let him use what he knew. Put granddaddy Krafft in charge instead."

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"But Hys is in charge of an army now?"

"All volunteers, too few of them and too little money. Too little and too damned late to do any good. I'll never be good enough. And for this we get called butchers." There was a catch in Telt's voice now, an undercurrent of emotion he couldn't suppress. "At home they think we like to kill. Think we're insane. They can't understand we're doing the only thing that has to be done—" He broke off as he quickly locked on the brakes and killed the engine. The line of sandcars had come to a stop. Ahead, just visible over the dunes, was the summit of a dark tower.

"We walk from here," Telt said, standing and stretching. "We can take our time because the other boys go in first, soften things up. Then you and I head for the sub-cellar for a radiation check and find you a handsome corpse."

Walking at first, then crawling when the dunes no longer shielded them, they crept up on the Disan keep. Dark figures moved ahead of them, stopping only when they reached the crumbling black walls. They didn't use the ascending ramp, but made their way up the sheer outside face of the ramparts.

"Linethrowers," Telt whispered. "Anchor themselves when the missile hits, have some kind of quicksetting goo. Then we go up the filament with a line-climbing motor. Hys invented them."

"Is that the way you and I are going in?" Brion asked.

"No, we get out of the climbing. I told you we hit this rock once before. I know the layout inside." He was moving while he talked, carefully pacing the distance around the base of the tower. "Should be right about here."

High-pitched keening sliced the air and the top of the magter building burst into flame. Automatic weapons hammered above them. Something fell silently through the night and hit heavily on the ground near them.

"Attack's started," Telt shouted "We have to get through now, while all the creepies are fighting it out on top." He pulled a plate-shaped object from one of his bags and slapped it hard against the wall. It hung there. He twisted the back of it, pulled something and waved Brion to the ground. "Shaped charge. Should blow straight in, but you never can tell."

The ground jumped under them and the ringing thud was a giant fist punching through the wall. A cloud of dust and smoke rolled clear and they could see the dark opening in the rock, a tunnel driven into the well by the directional force of the explosion. Telt shone a light through the hole at the crumbled chamber inside.

"Nothing to worry about from anybody who was leaning against this wall. But let's get in and out of this black beehive before the ones upstairs come down to investigate."

Shattered rock was thick on the floor, and they skidded and tumbled over it. Telt pointed the way with his light, down a sharply angled

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ramp. "Underground chambers in the rock. They always store their stuff down there—"

A smoking, black sphere arced out of the tunnel's mouth, hitting at their feet. Telt just gaped, but even as it hit the floor Brion was jumping forward. He caught it with the side of his foot, kicking it back into the dark opening of the tunnel. Telt hit the ground next to him as the orange flame of an explosion burst below. Bits of shrapnel rattled from the ceiling and wall behind them.

"Grenades!" Telt gasped. "They only used them once before—can't have many. Gotta warn Hys." He plugged a throat mike into the transmitter on his back and spoke quickly into it. There was a stirring below and Brion poured a rain of fire into the tunnel.

"They're catching it bad on top, too! We gotta pull out. Go first and I'll cover you."

"I came for my Disan—I'm not leaving until I get one."

"You're crazy! You're dead if you stay!"

Telt was scrambling back towards their crumbled entrance as he talked. His back was turned when Brion fired. The magter appeared silently as the shadow of death. They charged without a sound, running with expressionless faces into the bullets. Two died at once, curling and folding, the third one fell at Brion's feet. Shot, pierced, dying, but not yet dead. Leaving a crimson track it hunched closer, lifting its knife to Brion. He didn't move. How many times must you murder a man? Or was it a man. His mind and body rebelled against the killing and was almost ready to accept death himself, rather than kill again.

Telt's bullets tore through the body and it dropped with grim finality.

"There's your corpse—now get it out of here!" Telt screeched.

Between them they worked the sodden weight of the dead magter through the hole, their exposed backs crawling with the expectation of instant death. There were no more attacks as they ran from the tower, other than a grenade that exploded too far behind them to do any harm.

One of the armored sandcars circled the keep, headlights blazing, keeping up a steady fire from its heavy weapons. The attackers climbed into it as they beat a retreat. Telt and Brion dragged the Disan behind them, struggling through the loose sand towards the circling car. Telt glanced over his shoulder and broke into a shambling run.

"They're following us—!" he gasped. "The first time they ever chased us after a raid!"

"They must know we have the body," Brion said.

"Leave it behind—!" Telt choked. "Too heavy to carry . . . anyway!"

"I'd rather leave you," Brion snapped. "Let me have it." He pulled the corpse away from the unresisting Telt and heaved it across his shoulders. "Now use your gun to cover us!"

Telt threw a rain of slugs back to-

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wards the dark figures following them. The driver must have seen the flare of their fire, because the truck turned and started towards them. It braked in a choking cloud of dust and ready hands reached to pull them up. Brion pushed the body in ahead of himself and scrambled after it. The truck engine throbbed and they churned away into the blackness, away from the gutted tower.

"You know, that was more like kind of a joke, when I said I'd leave the corpse behind," Telt told Brion. "You didn't believe me, did you?"

"Yes," Brion said, holding the dead weight of the magter against the truck's side. "I thought you meant it."

"Ahhh—" Telt grumbled. "You're as bad as Hys. Take things too seriously."

Brion suddenly realized that he was wet with blood, his clothing sodden. His stomach rose at the thought and he clutched the edge of the sandcar. Killing like this was too personal. Talking abstractedly about a body was one thing. But murdering a man, then lifting his dead flesh and feeling his blood warm upon you is an entirely different matter. Yet the magter weren't human, he knew that. The thought was only mildly comforting.

After they had reached the rest of the waiting sandcars, the raiding party split up. "Each one goes in a different direction," Telt said, "so they can't track us to the base." He clipped a piece of paper next to the compass and kicked the motor into life. "We'll make a big *U* in the desert and end up in Hovedstad, I got the course here. Then I'll dump you and your friend and beat it back to our camp. You're not still burned at me for what I said, are you? Are you?"

Brion didn't answer. He was staring fixedly out of the side window. "What's doing?" Telt asked. Brion pointed out at the rushing darkness.

"Over there," he said, pointing to the growing light on the horizon.

"Dawn," Telt said. "Lotta rain on your planet? Didn't you ever see the sun come up before?"

"Not on the last day of a world."

"Lock it up," Telt grumbled. "You give me the crawls. I know they're going to be blasted. But at least I know I did everything I could to stop it. How do you think they are going to be feeling at home—on Nyjord—from tomorrow on?"

"Maybe we can still stop it?" Brion said, shrugging off the feeling of gloom, Telt's only answer was a wordless sound of disgust.

By the time they had cut a large loop in the desert the sun was high in the sky, the daily heat begun. Their course took them through a chain of low, flinty hills that cut their speed almost to zero. They ground ahead in low gear while Telt sweated and cursed, struggling with the controls. Then they were on firm sand and picking up speed towards the city.

As soon as Brion saw Hovedstad clearly he felt a clutch of fear. From somewhere in the city a black plume of smoke was rising. It could have been one of the deserted buildings aflame, a minor blaze. Yet the closer

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they came, the greater the tension grew. Brion didn't dare put it into words himself, it was Telt who vocalized the thought.

"A fire or something. Coming from your area, somewhere close to your building."

Within the city they saw the first signs of destruction. Broken rubble on the streets. The smell of greasy smoke in their nostrils. More and more people appeared, going in the same direction they were. The normally deserted streets of Hovedstad were now almost crowded. Disans, obvious by their bare shoulders, mixed with the few offworlders who still remained.

Brion made sure the tarpaulin was well wrapped around the body before they pushed slowly through the growing crowd.

"I don't like all this publicity," Telt complained, looking at the people. "It's the last day, or I'd be turning back. They know our cars, we've raided them often enough." Turning a corner he braked suddenly.

Ahead was destruction. Black, broken rubble had been churned into desolation. It was still smoking, pink tongues of flame licking over the ruins. A fragment of wall fell with a rumbling crash.

"It's your building—the Foundation building!" Telt shouted. "They've been here ahead of us, must have used the radio to call a raid. They did a job, explosive of some kind."

Hope was dead. Dis was dead. In the ruin ahead, mixed and broken with the other rubble, were the bodies of all the people who had trusted him. Lea. Beautiful and cruelly dead Lea. Dr. Stine, his patients, Faussel, all of them. He had kept them on this planet and now they were dead. Every one of them. Dead

Murderer!

TO BE CONCLUDED

METABOLISM BASED ON SILICA?

Bug-eyed monsters that devour glass have been found. They were not on the moon, as one might anticipate, but were discovered in a bolt of fiberglass screen cloth belonging to a Miami, Florida, business house. The six-legged worms —truly bug-eyed but on the small side for monsters—had managed to chew nine holes, penetrating four layers of the bolt, before their crime was detected. They had cleverly spun the glass fibers into six cocoons.

Fiberglass is made by drawing threads from a base of molten silica (glass) and weaving them into cloth. Silica eaters are frequently introduced in the pages of science fiction but up to this time have not been known to terrestrials.

The worms found no nutriment in glass, but the fibers proved to be a delightful material for the manufacture of cocoons, the principal industry. The glass-working insects were tentatively identified as "bag-worms," the larvae of a particular moth, order Lepidoptera family Psychidae. One species of bagworm is a deadly foe of evergreen trees, but this is the first time that any of them have been known to go in for glass.

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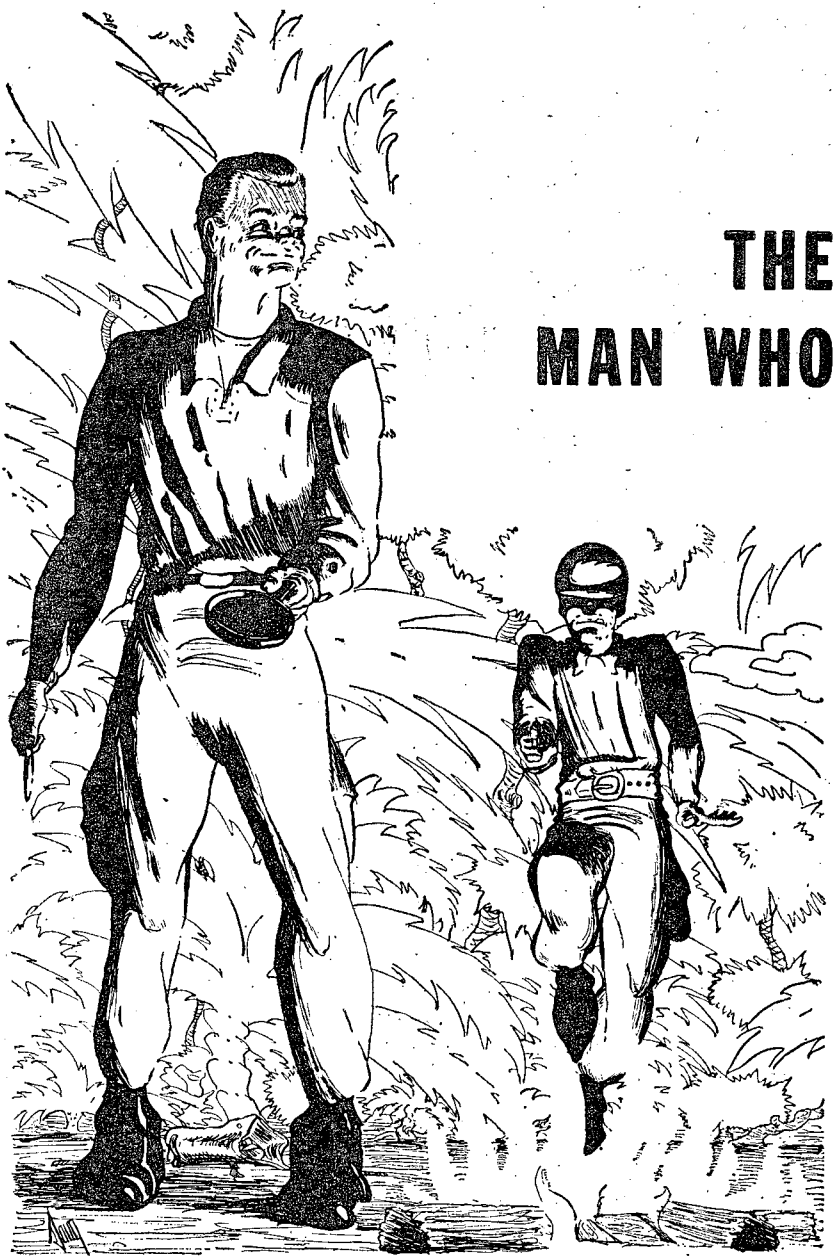

THE MAN WHO . .

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PLAYED TO LOSE

By LARRY M. HARRIS

Sometimes the very best thing you can do is to lose. The cholera germ, for instance, asks nothing better than that it be swallowed alive . . .

Illustrated by Douglas

WHEN I came into the control room the Captain looked up from a set of charts at me. He stood up and gave me a salute and I returned it, not making a ceremony out of it. "Half an hour to landing, sir," he said.

That irritated me. It always irritates me. "I'm not an officer," I said. "I'm not even an enlisted man."

He nodded, too quickly. "Yes, Mr. Carboy," he said. "Sorry."

I sighed. "If you want to salute," I told him, "if it makes you *happier* to salute, you go right ahead. But don't call me 'Sir.' That would make me an officer, and I wouldn't like being an officer. I've met too many of them."

It didn't make him angry. He wasn't anything except subservient and awed and anxious to please. "Yes, Mr. Carboy," he said.

I searched in my pockets for a cigarette and found a cup of them and stuck one in my mouth. The Captain was right there with a light, so I took it from him. Then I offered him a cigarette. He thanked me as if it had been a full set of Crown Jewels.

What difference did it make whether or not he called me "Sir"? I

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was still God to him, and there wasn't much I could do about it.

"Did you want something, Mr. Carboy?" he asked me, puffing on the cigarette.

I nodded. "Now that we're getting close," I told him, "I want to know as much about the place as possible. I've had a full hypno, but a hypno's only as good as the facts in it, and the facts that reach Earth may be exaggerated, modified, distorted or even out of date."

"Yes, Mr. Carboy," he said eagerly. I wondered if, when he was through with the cigarette, he would keep the butt as a souvenir. He might even frame it, I told myself. After all, I'd given it to him, hadn't I? The magnificent Mr. Carboy, who almost acts like an ordinary human being, had actually given a poor, respectful spaceship Captain a cigarette.

It made me want to butt holes in the bulkheads. Not that I hadn't had time to get used to the treatment; every man in my corps gets a full dose of awe and respect from the services, from Government officials and even from the United Cabinets. The only reason we don't get it from the man in the street is that the man in the street—unless he happens to be a very special man in a very unusual street—doesn't know the corps exists. Which is a definite relief, by the way; at least, off the job, I'm no more than Ephraim Carboy, citizen.

I took a puff on my cigarette, and the Captain followed suit, very respectfully. I felt like screaming at him but I kept my voice polite. "The war's definitely over, isn't it?" I said.

He shrugged. "That depends, Mr. Carboy," he said. "The armies have surrendered, and the treaty's been signed. That happened even before we left Earth—three or four weeks ago. But whether you could say the war was over . . . well, Mr. Carboy, that depends."

"Guerrillas," I said.

He nodded. "Wohlen's a jungle world, mostly," he said. "Sixty per cent water, of course, but outside of that there are a few cities, two spaceports, and the rest—eighty or ninety per cent of the land area—nothing but jungle. A few roads running from city to city, but that's all."

"Of course," I said. He was being careful and accurate. I wondered what he thought I'd do if I caught him in a mistake. Make a magic pass and explode him like a bomb, probably. I took in some more smoke, wondering whether the Captain thought I had psi powers—which, of course, I didn't; no need for them in my work—and musing sourly on how long it would take before the job was done and I was on my way back home.

Then again, I told myself, there was always the chance of getting killed. And in the mood I found myself, the idea of peaceful, unrespectful death was very pleasant.

For a second or two, anyhow.

"The Government holds the cities," the Captain was saying, "and essential trade services—spaceports, that sort of thing. But a small band of men can last for a long time out there in the wilds."

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"Living off the country," I said.

He nodded again. "Wohlen's nine-nines Earth normals," he said. "But you know that already."

"I know all of this," I said. "I'm just trying to update it a little, if I can."

"Oh," he said "Oh, certainly, S . . . uh . . . Mr. Carboy."

I sighed and puffed on the cigarette and waited for him to go on. After all, what else was there to do?

For a wonder, the hypno had been just about accurate. That was helpful; if I'd heard some new and surprising facts from the Captain it would have thrown all the other information I had into doubt. Now I could be pretty sure of what I was getting into.

By the time we landed, the Captain was through and I was running over the main points in my head, for a last-minute check.

Wohlen, settled in the eighty-fifth year of the Explosion, had established a Parliamentary form of government, set up generally along the usual model: bicameral, elective and pretty slow. Trade relations with Earth and with the six other inhabited planets had been set up as rapidly as possible, and Wohlen had become a full member of the Comity within thirty years.

Matters had then rolled along with comparative smoothness for some time. But some sort of explosion was inevitable—it always happens—and, very recently, that nice Parliamentary government had blown up in everybody's face.

The setup seemed to be reminiscent of something, but it was a little while before I got it: the ancient South American states, in the pre-Space days, before the United Cabinets managed to unify Earth once and for all. There'd been an election on Wohlen and the loser hadn't bowed gracefully out of the picture to set up a Loyal Opposition. Instead, he'd gone back on his hind legs, accused the winner of all sorts of horrible things—some of which, for all I knew, might even be true—and had declared Wohlen's independence of the Comity. Which meant, in effect, independence from all forms of interplanetary law.

Of course, he had no right to make a proclamation of any sort. But he'd made it, and he was going to get the right to enforce it. That was how William F. Sergeant's army was formed; Sergeant, still making proclamations, gathered a good-sized group of men and marched on the capital, New Didymus. The established government countered with an army of its own, and for eight months, neither side could gain a really decisive advantage.

Then the Government forces, rallying after a minor defeat near a place known as Andrew's Farm, defeated an attacking force, captured Sergeant and two of his top generals, and just kept going from there. The treaty was signed within eight days.

Unfortunately, some of Sergeant's supporters had been hunters and woodsmen—

Ordinarily, a guerrilla movement,

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if it doesn't grind to a halt of its own accord, can be stopped within a few weeks. Where a world is mostly cities, small towns, and so forth, and only a little jungle, the bands can be bottled up and destroyed. And most guerrillas aren't very experienced in their work; a small band of men lost in the woods can't do much damage.

But a small group of woodsmen, on a planet that consists mostly of jungle, is another matter. Those men knew the ground, were capable of living off the country with a minimum of effort, and knew just where to strike to tie up roads and transportation, halt essential on-planet services and, in general, raise merry hell with a planet's economy.

So the Wohlen government called Earth and the United Cabinets started hunting. Of course they came up with our corps—the troubleshooters, the unorthodox boys, the Holy Idols. And the corps fished around and came up with me.

I didn't really mind; a vacation tends to get boring after a week or two anyhow. I've got no family ties I care to keep up, and few enough close friends. Most of us are like that; I imagine it's in the nature of the job.

It was a relief to get back into action, even if it meant putting up with the kowtowing I always got.

When I stepped out onto the spaceport grounds, as a matter of fact, I was feeling pretty good. It took just ten seconds for that to change.

The President himself was waiting, as close to the pits as he could get. He was a chubby, red-faced little man, and he beamed at me as if he were Santa Claus. "Mr. Carboy," he said in a voice that needed roughage badly. "I'm so glad you're here. I'm sure you'll be able to do something about the situation."

"I'll try," I said, feeling foolish. This was no place for a conversation —especially not with the head of the Government.

"Oh, I'm sure you'll succeed," he told me brightly. "After all, Mr. Carboy, we've heard of your . . . ah . . . group. Oh, yes. Your fame is . . . ah . . . universal."

"Sure," I said. "I'll do my best. But the less I'm seen talking to you, the better."

"Nevertheless," he said. "If we need to meet—"

"If we do," I said, "there's a set of signals in the daily papers. Your Intelligence should know all about that, Mr. President."

"Ah," he said. "Of course. Certainly. Well, Mr. Carboy, I do want to tell you how glad I am—"

"So am I," I said. "Good-by."

The trouble with the democratic process is that a group of people picked at random can elect some silly leaders. That's been happening ever since ancient Greece, I imagine, and it'll go on happening. It may not be fatal, but it's annoying.

My job, for instance, was to prop up this foolish little man. I had to work against a group of guerrillas who were even more democratic, from all I'd heard, and who seemed

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to have a great leal of common, ordinary brains. Of course, I wasn't doing it for the President—it was for the Comity as a whole, and it needed to be done.

But I can't honestly say that that made me feel any better about the job.

I was driven out of the city right after I'd packed up my supplies—two days' food and water in a rude knapsack, a call-radio and some other special devices I didn't think I was going to need. But, I told myself, you never know . . . there was even a suicide device, just in case. I packed it away and forgot about it.

The city was an oasis in the middle of jungle, with white clean buildings and static-cleaned streets and walks. It didn't seem to have a park, but, then, it didn't need one. There was plenty of park outside.

The beautiful street became a poor one half a mile out of the city, and degenerated into a rough trail for ground vehicles soon after that. "How many people are there on this planet?" I asked my driver.

He never took his eyes from the road. "Two and a half million, last census," he said, with great respect.

That explained things, of course. As the population grew, the cities would expand and the forests would go under. It had happened on Earth, and on every settled planet. As recently as 1850, for instance, large tracts of New York City, where I make my home, were farm and forest; why, in 1960 the population was only about eight million, and they thought the place had reached its height.

Wohlen had only begun its drive to citify the planet. Give it another hundred and fifty years and the guerrillas couldn't exist, for simple lack of any place to hide and to live independently.

Unfortunately, the Government didn't have a hundred and fifty years. Judging from what I'd seen, the Government didn't have a hundred and fifty days. Rationing was in force at all the markets we'd passed on the way out, and there seemed to be a lot of cops. That's always a bad sign; it means normal processes are beginning to break down and anarchy is creeping in.

I thought about it. Three months was an outside limit. If I couldn't finish the job in three months, it might as well never be finished.

It's always nice to have a deadline, I told myself.

The car stopped at a place in the road that looked like any other place in the road. I got out, adjusted my knapsack and started away from the road, into the jungle that bordered it. The hypno I'd taken had told me there were farms scattered through the jungle, but I didn't know exactly where, and I didn't even want to find out. The knapsack was heavy, but I decided I could stand the weight.

In five minutes I was surrounded by jungle, without any quick way to tell me where the road had been. There was a trail, and maybe human

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beings had used it, but it was no more than a scratch in the vegetation.

That was green, like Earth's, and mostly spiny. I managed to scratch myself twice and then I learned to duck. After that the time went by slowly. I just kept walking, without much of an idea where I was going. After a couple of hours I was good and lost, which was just what I wanted. It was starting to get dark, so I took the opportunity of building a fire. I dug in my knapsack and found some food and started to cook it. I was still watching it heat up when I heard the noise behind me.

Those boys were good. He'd sneaked up through the jungle and come within a foot of me without my hearing him. I jumped up just as if I hadn't expected him and whirled around to face him.

He had his heater out and was covering me with it. I didn't reach for anything; I just watched him. He was a big man, almost as tall as I was and solidly built, with a jaw like a bulldog's and tiny, sparkling eyes. His voice was like rusted iron. "Relax," he told me. "I'm not burning you down, Mister. Not yet."

I made myself stare him down. "Who are you?" I said.

"Name don't matter," he said without moving the heater an inch. "What's important is, who are *you?* And what are you doing here?"

"James Carson's my name," I said. "I'm from Ancarta." It was a small city halfway around the planet, a nice, anonymous place to be from. "And I'm minding my own business."

"Sure," the big man said. He jerked his head and whistled, one sudden sharp note. The clearing was full of men.

They were all sorts, big and small, thin and fat, dressed in uniforms, cast-offs, suits, rags, anything at all. Half of them were carrying heaters. The rest had knives, some good and some home-made. They watched me and they watched the big man. Nobody moved.

"Maybe you're a Government man," the big man said, "and have come out to catch some of Bill Sergeant's boys."

"No," I said.

He grinned at me as if he hadn't heard me. "Well," he said, "this ought to be a big enough batch for you, Mister. Want to capture us all right now and take us back to New Didymus with you?"

"You've got me wrong," I said.

Another man spoke up. He was older, in his late forties, I thought. His hair was thin and gray but his face was hard. He had a heater strapped to his side, and he wore a good uniform. "Government men don't come out one at a time, do they, Huey?" he said.

The big man shrugged. "No way to tell," he said. "Maybe Mr. Carson here's got a call-radio for the rest of his boys. Maybe they're all just waiting for us, some place nearby."

"If they're waiting," the other man said, "they'd be here by now. Besides, Huey, he don't look like a Government man."

"Think they all got tails?" Huey asked him.

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I judged it was about time to put in a word. "I'm not Government," I said. "I'm from Ancarta. I'm here to help you—if you're the men I think you are."

That started some more discussion. Huey was all for labeling my offer a trick and getting rid of me then and there—after which, I suppose, he was going to clear out my mythical followers in the nearby jungle. But he was pretty well all alone; there's got to be a rotten apple in the best-picked barrel and these boys were smart. The only sensible thing to do was staring them in the face, and it didn't take them long to see it.

"We'll take you back with us," Huey's friend told me. "When we get to a safe place we can sit down and talk this out."

I wanted to insist on finishing my supper right where I was, but there's such a thing as playing a little too much for the grandstand. Instead, I was herded into the center of the group, and we marched off into the jungle.

Only it wasn't a march; there was no attempt at order. For a while we used the trail, and then straggled off it and went single-file through masses of trees and bushes and leaves. Being in the center of the line helped a little but not enough; the spines kept coming through and I got a few more nice scratches. The trip took about half an hour, and when we stopped we were in front of a cave-mouth.

The band went inside and I went with them. There was light, battery-powered, and what seemed to be all the comforts of a small, ill-kept town jail. But it was better than the naked jungle. I was still porting my knapsack, and when we got into the cave I unstrapped it and sat down and opened it. The men watched me without making any attempt to hide the fact.

The first thing I took out was an instant-heat food can. It didn't look like a bomb, so nobody did anything. They just kept watching while I came up with my call-radio.

Huey said: "What the hell!" and came for me.

I stood up, spilling the knapsack, and got ready to stand him off; but I didn't need to, not then. Three of the others piled on him, like dogs on a bear, and held him down. Huey's friend was at my side when I turned. "How come?" he said. "Who are you planning on calling?"

"I said I wanted to help you," I told him. "I meant it."

"Of course," he said smoothly. "Why should I believe it?"

"I know the spot you're in, and I—"

He didn't give me a chance to finish. "Now, you wait a minute," he said. "And don't touch that box. We've got some talking to do."

"Such as?"

"Such as how you managed to get here from Ancarta, and why," he said. "Such as what all this talk about helping us means, and what the radio's for. Lots of talking."

I decided it was time to show some more independence. "I don't talk to people I don't know," I said.

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He looked me up and down, taking his time about it. Huey had quieted down some, and our conversation was the main attraction. In the end he shrugged. "I suppose you can't do any harm, not so long as we keep an eye on that box of yours," he said. He gave me his name as if it didn't matter. "I'm Hollerith," he said. "General Rawlinson Hollerith."

I gave him the prepared story automatically; it rolled out but I wasn't thinking about it. He'd given me my first real surprise; I'd thought Hollerith had been killed at Andrew's Farm, and, as far as I knew, so did the Government. Instead, here he was, alive and kicking, doing a pretty good job of working with a guerrilla gang. I wondered who Huey would turn out to be, but it didn't seem like the time to ask.

The story, of course, was a good one. Naturally it wasn't proof of anything, or even susceptible of proof right then and there; it wasn't meant to be. I didn't expect them to buy it sight unseen, but I'd planned it to give me some time until I could start the next step.

James Carson, I told Hollerith, was a reasonably big wheel around Ancarta. He wasn't in sympathy with the Government, but he hadn't fought in the revolutionary armies or been active in any overt way.

"Why not?" he snapped at me.

"I was more valuable where I stood," I said. "There's a lot that can be done with paper work in the way of sabotage."

He nodded. "I see," he said. "I see what you mean."

"I worked in one of the Government departments," I said. "That enabled me to pass information on to Sergeant's men in the vicinity. It also gave me a good spot for mixing up orders and shipments."

He nodded again. "That's one of the advantages of a guerrilla outfit," he said. "The administration end really doesn't exist; we can live off the country. I should think that, over an area as large as we can range on Wohlen, we can't be wiped out."

Of course, that was only his opinion; but I wasn't easy about it. The sight of him had shaken me quite a bit and I began to think I'd have to get rid of him. That would be unpleasant and dangerous, I told myself. But there didn't seem to be any help for it, at the moment.

"About information," he said. "You were closely watched—anyone working for the Government would have had to have been. How did you get your information out?"

I nodded toward the radio. "It's not a normal call-radio," I said, with perfect truth. "Its operation is indetectable by the normal methods. I'm not an expert, so I won't go into technical details; it's enough that the radio works."

"Then why come to us?" Hollerith said. "Aren't there guerrillas in the Ancarta vicinity for you to work with?"

I shook my head. "Only a few more or less . . . ah . . . disaffected minorities," I said. That was true, too.

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"They raised hell for a day or so, then walked in and surrendered. The guerrilla network on the entire planet, sir, is under your command."

He shook his head. "It's not my command," he said. "This is a democracy. You've met Huey . . . my orderly, in the old days. But now he has as much voice as I have. Except for expert matters."

Crackpots. But I listened. Democracy was the basis of their group; every move was voted on by the entire band, wherever possible. "We're not a dictatorship," Hollerith said. "We don't intend to become one."

It was nice to hear that; it meant that, maybe, I wouldn't have to get rid of him after all. "Anyway," I said, "your men appear to be the only ones active on Sergeant's behalf."

He took it without flinching. "Then we need help," he said. "Can you provide it?"

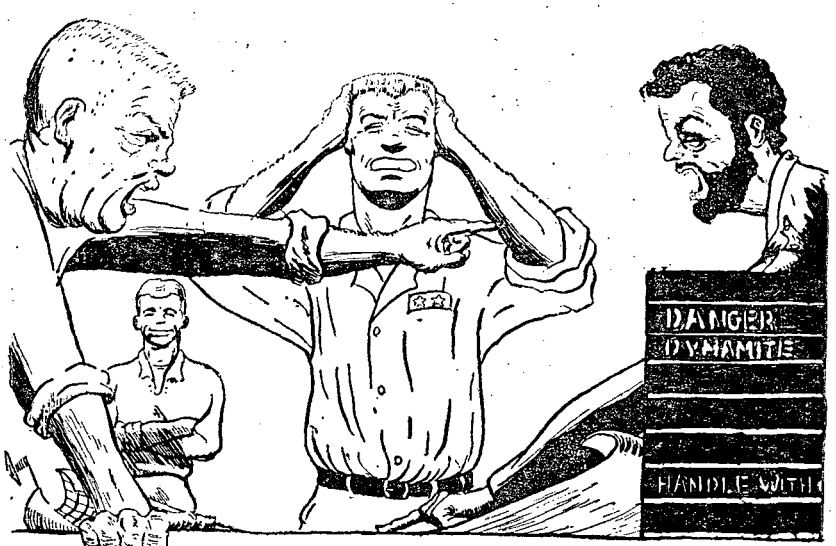
"I can get you guns," I said. "Volunteers. Supplies."

There was a little pause.

"Who do you think you are?" Hollerith said. "God?"

I didn't tell him that, from his point of view, I was inhabiting the other half of the theological universe. Somehow, it didn't seem necessary.

The men started to arrive in a week, some of them carrying supplies and armaments for all the rest. Hollerith was beside himself with joy, and even Huey stopped looking at me with suspicion. In the meantime, I'd been living with the guerrillas, eating and sleeping with them, but I hadn't been exactly trusted. There'd been a picked group of men set to



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watch over me at all times, and I managed to get a little friendly with them, but not very. In case I turned out to be a louse, nobody wanted to have to shed tears over my unmarked grave.

Until the men arrived, there weren't any raids; Hollerith, very sensibly, wanted to wait for my reinforcements, and he carried most of the group with him. Huey was all for killing me and getting on with normal operations; I don't think he had any real faith in me even after the reinforcements began to arrive.

I'd made the call on my radio, in Hollerith's hearing. I'd asked for one hundred and fifty men—a force just a bit larger than the entire band Hollerith had commanded until then—three hundred heaters with ammunition and supplies to match, a couple of large guns throwing explosive shells, and some dynamite. I added the dynamite because it sounded like the sort of thing guerrillas ought to have, and Hollerith didn't seem to mind. On his instructions, I gave them a safe route to come by, assuming they started near New Didymus; actually, of course, some of my corps brothers were recruiting on other parts of the planet and the Government had been fully instructed not to hold any of them up. I won't say that President Santa Claus understood what I was doing, but he trusted me. He had faith—which was handy.

Hollerith was overjoyed when the reinforcements did arrive. "Now we can really begin to work," he told me. "Now we can begin to fight back in a big way. No more of this sneaking around, doing fiddling little jobs—"

He wanted to start at once. I nearly laughed in his face; it was now established that I didn't have to get rid of the man. If he'd decided to delay on the big attack . . . but he hadn't.

So, of course, I helped him draw up some plans. Good ones, too; the best I could come up with.

The very best.

"The trouble," Hollerith told me sadly, a day or so later, "is going to be convincing the others. They want to do something dramatic—blowing up the planet, most likely."

I said I didn't think they planned to go that far, and, anyhow, I had an idea that might help. "You want to take the Army armaments depot near New Didymus," I said. "That would serve as a good show of strength, and weaken any reprisals while we get ready to move again."

"Of course," he said.

"Then think of all the fireworks you'll get," I said. "Bombs going off, heaters exploding, stacks of arms all going off at once—the Fourth of July, the Fourteenth, and Guy Fawkes Day, all at once, with a small touch of Armageddon for flavor. Not to mention the Chinese New Year."

"But—"

"Sell it that way," I said. "The drama. The great picture. The excitement. That, believe me, they'll buy."

He frowned while he thought it

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over. Then the frown turned into a grin. "By God," he said, "they might."

And they did. The conference and the election were both pretty stormy. All the new patriots were off to blow up the Government buildings one after another, even more enthusiastic than the original members. It was only natural; my instructions to the recruiters had been to pick the most violent, frothing anti-Government men they could find to send out, and that was what we got. But Hollerith gave them a talk, and the vote, when it came, was overwhelmingly in favor of his plan.

Even Huey was enthusiastic. He came up to me after the meeting and pounded me on the back; I suppose it was meant for friendship, though it felt more like sabotage. "Hey, I thought you were no good," he said. "I thought you were . . . oh, you know, some kind of a spy."

"I know," I said.

"Well, Mister," he said, "believe me, I was wrong." He pounded some more. I tried to look as if I liked it or, anyway, as if I could put up with it. "You're O.K., Mister," he said. "You're O.K."

Some day, I told myself, I was going to get Huey all to myself, away in a dark alley somewhere. There didn't seem to be much chance of keeping the promise, but I made it to myself anyway, and moved away.

The meeting had set the attack for three days ahead, which was a moral victory for Hollerith; the men were all for making it in the next five minutes. But he said he needed time —it's a good thing, I told myself, that he didn't say what he needed it for. Because in a few hours, right after sunrise the next morning, training started and Hollerith had his hands full of trouble.

The new men didn't see the sense in it. "Hell," one of them complained, "all we got to do is go up and toss a bomb into the place. We don't like all this fooling around first."

The "fooling around" involved jungle training—how to walk quietly, how to avoid getting slashed by a vine, and so forth. It also involved forming two separate attack groups, for Hollerith's plans. That meant drilling the groups to move separately, and drilling each group to stay together.

And there were other details: how to fire a heater from the third rank without incinerating a comrade in the front rank; signal-spotting, in case of emergency and sudden changes of plan; the use of dynamite, its care and feeding; picking targets—and so forth and so forth. Hollerith's three days seemed pretty short when you thought about what they had to cover.

But the new men didn't like it. They wanted action. "That's what we signed on for," they said. "Not all this drill. Hell, we ain't an army—we're guerrillas."

The older hands, and the more sensible members of the band, tried their best to talk the new men into line. Some of the officers tried ordering them into line.

But the talk was ignored. And as

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for the officers—well, the old United States Civil War tried a democratic army for a while, on both sides. Unfortunately, electing your officers is not an efficient way to run things. The most popular man makes the best officer about as often as the most popular man makes the best criminal-law judge. Or engineer, for that matter. War's not a democratic business.

This one, however, seemed to be. Mass election of officers was one of the rules, along with the voting on staff decisions. The new men outnumbered the older hands. New officers were elected—and that stopped the orders.

Hollerith was about two-thirds of the way out of his mind when the three days were up and the attack time came around. When night fell, the atmosphere around the cave was as tense as it could get without turning into actual lightning. It was a warm, still night; the single moon was quarter-full but it shed a lot more light than Earth's moon; we blacked ourselves and Hollerith went over the plans. We were still divided into two groups—ragged groups, but groups. The first wave was to come around on the depot from the left, attacking in full force with all armaments and some of that dynamite. When things were getting toward a peak in that direction, the second force was to come in from the right and set off its own fireworks. Result (Hollerith hoped): demolition, confusion, catastrophe.

It was a good plan. Hollerith obviously wasn't sure of his own men any more—and neither would I have been, in his spot. But he had the advantage of surprise and superior arms; he was clearly hoping that would overbalance the lack of discipline, training and order in his force. Besides, there was nothing else he could do; he was outvoted, all the way down the line.

I set out, with hardly a qualm, along with the second attack group. We were under the command of a shy, tall man with spectacles who didn't look like much, he'd been a trapper before the war, though, and was one of the original guerrillas, for a wonder, and that meant he was probably a hell of a lot tougher and more knowledgeable than he seemed. Setting traps for Wohlen's animals, for instance, was emphatically not a job for the puny or the frightened. The first group was under Huey's command.

Hollerith stayed with a small group of his own as a "reserve"; actually, he wanted to oversee the battle, and the men were perfectly willing to let him, having gotten one idea into their democratic heads: Hollerith was too valuable a man for the guerrillas to lose.

But I wasn't, of course. I'd done my bit; I'd gotten the volunteers. Now I could go and die for glory like the rest of them.

The trouble was, I couldn't see any way out. I marched in the dimness with the rest, and we managed to make surprisingly little noise.

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Wohlen's animals were active and stirring, anyhow, and that helped.

At last the depot showed up in the moonlight with the city some distance behind it. There was a wire fence, and a sentry, immediately in view behind him were square blocky buildings in a clearing. Beyond that there was another fence, then some more jungle, and then the city. Fifty yards from the fence, in the last screen of trees, we stopped and waited.

The first group was off to the other side of the fence, and I couldn't see or hear them. The wait seemed to go on for hours; perhaps a minute and a half passed. Then the first heater went off.

The sentry whirled and fired without really thinking. There wasn't any way for him to tell what he was shooting at. More heaters went off from the jungle, and then they started to come in. There was a lot of noise.

The boys were yelling, swarming over the wire fence and through it, firing heaters wildly. There were lights in the buildings, now, and a picked group of men came out of one of them, swinging in single file; the heaters chopped them to pieces before they had much of a chance. A tower light went on and then the really big guns got going.

The guerrillas started to get it, then. The big boys from the armaments tower charred holes in their line, and the noise got worse; men were screaming and cursing and dying and the heaters were still going off. I tore my eyes away and looked at the leader of our group. He was poised on the balls of his feet, leaning forward; he stayed that way, his head nodding very slowly up and down, for a full second. Then he shouted and lifted an arm and we followed him, a screaming mob heading down into hell.

The big guns were swiveled the other way and for a couple of seconds we had no trouble. Our boys weren't playing with heaters too much; instead, the dynamite started to fly. Light the fuse, pick it up, heave—and then stand back and watch. Fireworks. Excitement. Well, it was what they wanted, wasn't it?

There was an explosion as a small bundle landed inside the fence, in a courtyard. Then another one, the flashes lighting up faces and bodies in motion. I found myself screaming with the rest of them.

Then the big one went off.

One of the dynamite bundles had hit the right spot. Ammunition went off with a dull boom that shook the ground, and the light was too bright to look into. I went flat and so did the others; I wondered about solid shells exploding and going wild, but there weren't any. The light faded, and then it began to grow again.

I put my head up and saw flames. Then I got up and saw the others rising, too. I turned tail for the jungle. Some of them followed me, along with some of the first group; order was lost entirely and we were no more than pieces of a shrieking, delirious, victorious mob. I headed back for the base.

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Behind me the ammunition depot burned brightly. The raid was over.

It had been an unqualified success, of course. The guerrillas had done the best job of their careers.

So far.

Hollerith was back to the cave before me. Put it down to a short-cut, or just more practice in the jungle. When I came in he looked terrible, about a hundred and twelve years old and shrunken. But my appearance seemed to rouse him a little. He gestured and the others in the cave—three or four of them—went out. One stood at the entrance.

There was a silence. Hollerith grimaced at me. "You're working for the Government," he said. It wasn't a question.

I shook my head. "I—"

"Keep it," he said. "James Carson from Ancarta is a cover identity, that's all. I tell you, I *know*."

He didn't look ready to pull a heater. I waited a second. The silence got louder. Then I said: "All right. How do you know?"

The grimace again, twisted and half-humorous. "Why, because you got me recruits," he said. "Because you got me armaments. Because you helped me."

"Doesn't make sense," I said.

"Doesn't it?" He turned away from me for a second. When he turned back he looked more like General Rawlinson Hollerith, and less like a corpse. "You got me fanatics, men who hated the Government."

"Well?"

"They don't think straight," he said. "There isn't room in their minds for any more than that hatred. And they're democratic, just like the rest of us. They vote."

"You set that up," I said. "I had nothing to do with it."

He nodded. "I know," he said. "There are places where democracy just doesn't work. Like an armed force. As long as most of the members think alike, you're all right. But when a new factor comes into the picture—why, nobody knows what he's voting for. It becomes a matter of personal preference—which is no way to run a war."

"All right," I said. "But I got you the men and the arms—"

"Sure you did," he said. "You got me everything I needed—to hang myself with." He raised a hand. "I'm not saying you worked against me. You didn't have to."

"I got you everything you wanted," I said.

"Sure," he said. "Did you ever hear of jujitsu?"

"I—"

"You used my strength against me," he said. "You got me what I wanted—and did it in such a way that it would ruin me."

"But the attack was a success," I said.

He shook his head. "How many men are going to come back?" he said. "Fifty? Sixty? How many of them are going to get lost out there, return to the city, try to go up against New Didymus with a heater and nothing else? How many of them

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have had all the excitement they want? Those are going to head for home. A success—"

He paused. I waited.

"There was a general in Greece in the ancient days," he said. "A general named Pyrrhus. He won a battle once, and lost most of his men doing it. 'For my part,' he said, 'another victory like this and we are undone.' That's the kind of success we had."

Hollerith had brains. "A Pyrrhic victory," I said.

"And you know all about it," he said. "You planned it this way."

I shrugged. "By doing what you wanted done," I said.

He nodded, very slowly.

"What now?" I said quietly.

He acted, for a second, as if he didn't hear me. Then he spoke. "Now," he said, "we go back. Democracy—it's a limited tool, like anything else. No tool is so good that it can be used in every case, on every problem. We were wrong. We'd better admit it and go back."

"But your men—"

"The good ones know the truth now," he said, "just as I do. The others . . . there's nothing else they can do, without me and without the rest of the force."

I took a deep breath. It was all over.

"And now," he said suddenly, "I want you to tell me just who you are."

"I—"

"Not James Carson," he said. "And not from Ancarra. Not even from Wohlen."

"How do you know?" I said.

"Nobody on this planet," he said, "would do this job in just this way. I'm familiar enough with the top men to be sure of that. You're from the Comity."

"That's right," I said.

"But . . . who are you? What force? What army?"

"No army," I said. "You might call me a teacher; my corps is made up of teachers. We give lessons—where lessons are needed."

"A teacher," he said quietly. A long time passed. "Well," he asked, "do I pass the course?"

"You pass," I told him. "You pass—with high marks, General."

I was off-planet within twenty-four hours. Not that Santa Claus didn't want me to stay longer, when I told him what had happened. Hell, he wanted to throw a banquet and sixteen speeches in my honor. I was a holy Idol all over again. I was superhuman.

I was glad to get away. What makes them think a man's special, just because he uses his brain once in a while?

THE END

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Continued from page 82
great the need. He wondered if it would be possible for the biologists and the geneticists to trace the evolution of the animal. He hoped so. At least they deserved that much.

Dodeth Pell delayed returning to his own city; he wanted to wait until the final results had been brought in before he returned to his duties. The delay turned out to be a little longer than he expected—much longer, in fact. The communicator in his temporary room buzzed, and when he answered, Wygor's voice came to him, a rush of excited words that didn't make any sense at all at first. And when it did make sense he didn't believe it.

"What?" he squealed. "*What?*"

"I said," Wygor repeated, "that the report has come back from the pesticide column! They've found no trace of any such animal as we've described! They're nowhere to be found, in or near the clearing!"

"I think," said Dodeth very calmly, "that I'll take a little trip over to the Brightside and take up permanent residence there. It's going to be pretty hot for me around here before long."

And he cut the connection without waiting for Wygor's answer.

The armored car jounced across the grassland at high speed. Behind it, two more cars followed, each taking care not to run exactly in the tracks of the one ahead, so that there would be as little damage as possible done to the grass.

In the lead car, Dodeth Pell watched the forest loom nearer, wondering what sort of madness he would find in there this time. Beside him, the Eldest Keeper dozed gently, in the way that only the very young or the very old can doze. It was just as well; Dodeth didn't feel much like talking.

This time, as they approached the clearing, he didn't bother to tell the car to stop two miles away. If the animals were gone, there was no point in being cautious. All through the wooded area, he could see occasional members of the pesticide robots, and some of the patrol robots. He told the car to stop at the base of the little rise that he had used before as a vantage point. Then, without further preliminaries, he got out of the car and marched up the slope to take a look at the clearing. Overhead, the burning spark of the Yellow Sun cast its pale radiance over the landscape.

At the ridge, he stopped suddenly and ducked his head. Then he grabbed his field glasses and took a good look.

The animals had built themselves a few crude-looking shelters out of the logs, but he hardly noticed that.

There were four of the animals, in plain sight, standing guard!

The others were obviously inside the rude huts, asleep!

Great galloping fungus blight! Was he out of his mind? What was going on around here? Couldn't the robots *see* the beasts?

"That's very odd," said the voice of

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the Eldest Keeper in puzzled tones. "I thought the robots said they'd gone away. Lend me your field glasses."

As he handed the powerful glasses over to the Keeper, who had followed him up the hill, Dodeth said: "I'm glad you can see them. I thought maybe my brain had been short-circuited."

"I can see them," said the Eldest Keeper, peering through the glasses. Then he handed them back to Dodeth. "Let's get back down to the car. I want to find out what's going on around here."

At the car, the Eldest Keeper just scowled for a moment, looking very worried. By this time, the other two cars had pulled up nearby, discharging their cargo of two more Keepers apiece. While the Eldest Keeper talked in low tones with his colleagues, Dodeth stalked over to one of the pesticide robots who was prowling nearby.

"Found anything useful?" he asked sarcastically, knowing that sarcasm was useless on a robot.

"I'm not looking for anything useful, sir. I'm looking for the animals we are supposed to destroy."

"You come over and tell the Eldest Keeper that," Dodeth said.

"Yes, sir," the robot agreed promptly, rolling along beside Do-

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deth as he returned to where the Keepers were waiting.

"What's going on here?" the Eldest demanded curtly of the robot. "Why haven't you destroyed the animals?"

"Because we can't find them, sir."

"What's your name?" the Eldest snapped.

"Arike, sir."

"All right, Arike," said the Eldest somewhat angrily. "Stand by for orders. You'll repeat them to the other robots, understand?"

"Yes, sir," said the robot.

"All right, then," said the Eldest. "First, you take a run up that hill and look into that clearing. You'll see those creatures in there all right."

"Yes, sir. I've seen those creatures in there."

The Eldest Keeper exploded. "Then get in there and obey your orders! Don't you realize that their very existence threatens the life of all of us? They must be eliminated before our whole culture is destroyed! Do you understand? Obey!"

"Yes, sir," said the robot. His voice sounded odd, but he spun around and went to pass the word on to the other robots. Within minutes, more and more of the pesticide robots were swarming towards and into the clearing. They could hear rumbling noises from the clearing—low grunts that were evidently made by the animals who were trapped by the encircling robots.

And then there was a vast silence.

Dodeth and the Keepers waited.

Not a shot was fired.

It was as though a great, soundproof blanket had been flung over the whole area.

"What in the Unknown Name of the Universal Motivator is going *on* around here?" said Dodeth in a hushed tone. He wondered how many times he had asked himself that.

"We may as well take a look," said the Eldest Keeper.

Two hundred pesticide robots were ranged around the perimeter of the clearing, their weapons facing inward. Not a one of them moved.

Inside the circle of machines, the twenty wygorex stood motionless, watching the ring of robots. Now and then, one of them gave a deep, coughing rumble, but otherwise they made no noise.

Dodeth Pell could stand it no longer. "Robots!" He shouted as loudly as he could, his voice shrill with urgency. "I order you to fire!"

It was as though he hadn't said a word. Both robots and wygorex ignored him completely.

Dodeth turned and yelled to one of the patrol robots that was standing nearby. "You! What's your name?"

"Arvam, sir."

"Arvam, can you tell what it is those things have done to the robots?"

"They haven't done anything, sir."

"Then why don't the robots fire as they've been told?" Dodeth didn't want to admit it, even to himself, but he was badly frightened. He had never heard of a robot behaving this way before.

"They can't, sir."

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"They *can't?* Don't they realize that if those things aren't killed, we may all die?"

"I didn't know that," said the patrol robot. "If we do not kill them, then you may be killed, and you have ordered us to kill them, but if we obey your orders, then we will kill them, and that will mean that you won't be killed, but they will, so we can't do that, but if we don't then you *will* be killed, and we must obey, and that means we must, but we can't, but if we don't we will, and we can't so we must but we can't but if we don't you will so we must but we can't but we—" He kept repeating it over and over again, on and on and on.

"Stop that!" snapped Dodeth.

But the robot didn't even seem to hear.

Dodeth was really frightened now. He looked back at the five keepers and scuttled toward them.

"What's wrong with the robots?" he asked shrilly. "They've never failed us before!"

The Eldest Keeper looked at him. "What makes you think they've failed us now?" he asked softly.

Dodeth gaped speechlessly. The Eldest didn't seem to be making any more sense than the patrol robot had.

"No," the Keeper went on, "they haven't failed us. They have served us well. They have pointed out to us something which we have failed to see, and, in doing so, have saved us from making a catastrophic error."

"I don't understand," said Dodeth.

"I'll explain," the Eldest Keeper said, "but first go over to that patrol robot and tell him quietly that the situation has changed. Tell him that we are no longer in any danger from the wygorex. Then bring him over here."

Dodeth did as he was told, without understanding at all.

"I still don't understand, sir," he said bewilderedly.

"Dodeth, what would happen if I told Arvam, here, to fire on you?"

"Why . . . why, he'd *refuse.*"

"Why should he?"

"Because I'm *human!* That's the most basic robot command."

"I don't know," the Eldest said, eying Dodeth shrewdly. "You might not be a human. You might be a snith. You *look* like a snith."

Dodeth swallowed the insult, wondering what the Eldest meant.

"Arvam," the Eldest Keeper said to the robot, "doesn't he look like a snith to you?"

"Yes, sir," Avram agreed.

Dodeth swallowed that one, too.

"Then how do you know he *isn't* a snith, Arvam?"

"Because he behaves like a human, sir. A snith does not behave like a human."

"And if something does behave like a human, what then?"

"Anything that behaves like a human is human, sir."

Dodeth suddenly felt as though his eyes had suddenly focused after being unfocused for a long time. He gestured toward the clearing. "You mean those . . . those *things* . . . are . . . *human?*"

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"Yes, sir," said Arvam stolidly.

"But they don't even *talk!*"

"Pardon me for correcting you, sir, but they do. I cannot understand their speech, but the pattern is clearly recognizable as speech. Most of their conversation is carried on in tones of subsonic frequency, so your ears cannot hear it. Apparently, your voices are supersonic to them."

"Well, I'll be fried," said Dodeth. He looked at the Elder Keeper. "That's why the robots reported they couldn't find any *animal* of that description in the vicinity."

"Certainly. There weren't any."

"And we were so fooled by their monstrous appearance that we didn't pay any attention to their actions," said Dodeth.

"Exactly."

"But this makes the puzzle even *worse,*" said Dodeth. "How could such a creature evolve?"

"Look!" interrupted one of the other Keepers, pointing. "Up there in the sky!"

All eyes turned toward the direction the finger pointed.

It was a silvery speck in the sky that moved and became larger.

"I don't think they're from our World at all," said the Eldest Keeper. He turned to the patrol robot. "Arvam, go down and tell the pesticide robots that there is no danger to us. They're still confused, and I have a feeling that the humans in that ship up there might not like it if we are caught pointing guns at their friends."

As Arvam rolled off, Dodeth said "Another World?"

"Why not?" asked the Eldest. "The Moon, after all, is another World. smaller than ours, to be sure, and airless, but still another World. We haven't thought too much about other Worlds because we have our own World to take care of. But there was a time, back in the days of the builders of the surface cities, when our people dreamed such things. But our Moon was the only one close enough, and there was no point in going to a place which is even more hellish than our Brightside.

"But suppose the Yellow Sun also has a planet—or maybe even one of the more distant suns, which are hardly more than glimmers of light. They came, and they landed a few of their party to make a small clearing. Then the ship went somewhere else—to the dark side of our Moon, maybe, I don't know. But they were within calling range, for the ship was called as soon as trouble appeared.

"We don't know anything about them yet, but we will. And we've got to show them that we, too, are human. We have a job ahead of us—a job of communication.

"But we also have a great future if we handle things right."

Dodeth watched the ship, now grown to a silvery globe of tremendous size, drift slowly downward toward the clearing. He felt an inward glow of intense anticipation, and he fidgeted impatiently as he waited to see what would happen next.

He rippled a stomp.

THE END

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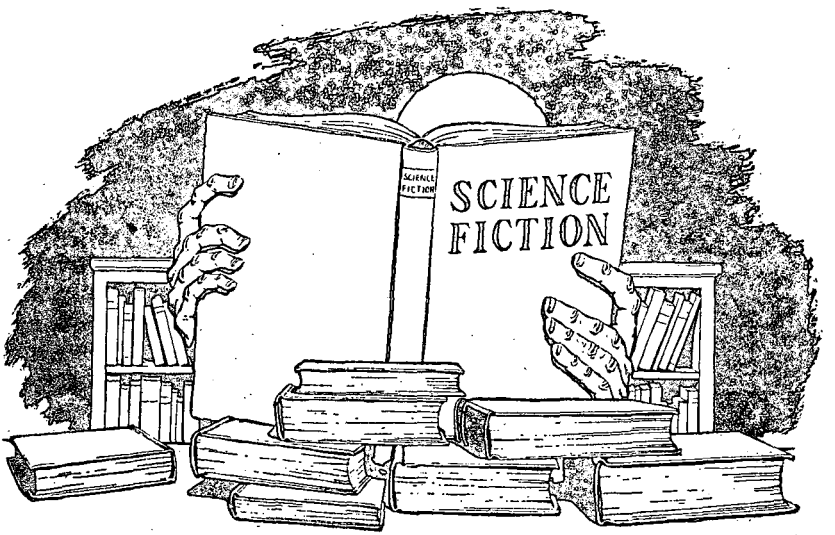
By P. SCHUYLER MILLER



WONDERFUL

I'VE SOUNDED off, from time to time, about the real meanings of "best" and "great" as applied to collections of science-fiction stories. General argument has been that the tag means one thing to the publisher—who hopes readers will see things his way—and another to the editor or anthologist.

Another term that is tossed around freely is "sense of wonder." It's supposed to be something the old SF had, that the present-day variety lacks. This may be quite true of the field as a whole, and, if so, it means that a group of competent editors have found that their readers seem to be tired of it—but it does not mean that we don't have authors who can write "wonderful" stories, not only as good as the old ones but better, because they are more thoughtful and professional about it.

Prime example is Poul Anderson, often enough represented in these pages. Circumstances have brought in three of his books—two novels and

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a collection of shorts—almost together, so this is Anderson month in Ye Olde Reference Library.

Ballantine Books, under the title "Strangers from Earth"—No. 483K; 144 pp; 35¢—has brought together eight Anderson stories, three of which first appeared right here in ASF. My favorite among them, "Gypsy"—here in 1950—is a prime example of what this mature writer can do with what might have been a trite theme. He shows us a gradually stabilizing colonial society on a far planet, and makes us feel the restlessness—the actual torment—of those of them who can't forget the wonders of space roving. And he has managed to distill it down to a couple of paragraphs of wonderful memories, as the comrades remember what they saw and did in their years of roving—the beauty and the terror, the infinite variety of an infinite universe.

Though "Gypsy" is worth the price of admission, the other seven are also good. "Earthman, Beware" is a portrait of a castaway from a cosmic race —a "wolf child"—brought up on Earth and trying to regain his own people; its ending presents a psychological and educational truth that no one else has shown quite so well. "Quixote and the Windmill"—here in 1950—is a slight tale with a bitter twist: the extrapolation of the automation problem which is just biting into our society. "For the Duration" is another bit of extrapolation, to the dictatorship that has pulled a wrecked society together after the War to End Mankind, and the kind of people who can overthrow it.

"Duel on Syrtis" was in the deceased *Planet Stories* in 1951. Theme, ordinary—a brutal human hunter out to get a Martian as a trophy. Handling, good but not what the author would do in 1961. Another gimmick story—with a punch line that can't be revealed—is "The Star Beast," in which a bored futurian moves into the body of a tiger, just for kicks. "The Disintegrating Sky" is fantasy, and the least of the lot— "we're just actors in someone's story." The closer, "Among Thieves," however, is another lovely bit of political finagelry that recalls some of Anderson's Dominick Flandry escapades. It was here in 1957, and it might make good reading for our State Department.

The second paperback, "Orbit Unlimited"—Pyramid Books; 158 pp; 35¢—has been put together out of two stories from ASF, a third from *Fantastic Universe,* and some expanding. The two bits that were here are the first two episodes: "Robin Hood's Barn" in January 1959, and "The Burning Bridge" in January '60.

The resulting book is a combination of political maneuvering, in the manner of "Among Thieves," and superior planetary adventure. For me, it starts rather slowly and picks up interest as it goes along. We are shown a future Earth, regimented and comfortable, whose benign dictator forces the rebellious elements who still carry some promising genes

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into taking that nucleus of hope away from Earth to a distant, not too hospitable planet. The second episode begins to draw character: the starship captain who has to decide whether to continue or turn back, when a fragmentary message seems to give them that option. In a third episode —a neat little problem story with value-choices thrown in—the colonists land, and we sense the rifts forming among them.

The last third of the book is really a story in itself, and by far the best. Here are the colonists, established with difficulty on a high plateau above the clouds of Rustum, a world too large, with too dense an atmosphere, for ordinary human beings to live at sea level. Stresses on their society are producing strains—test-tube children, for example, who know they're not wanted; dogged religious isolationism on the part of the former space captain. Then an exogenetic child runs away, and most of the community are too busy—actually and in rationalization—to help look for one of "them." Finally two men, representing totally different social values, do start to look for him and come up against the grim hostility of an undefeated world.

Once upon a time, this kind of story would have been only about the struggle with Rustum. There would have been more monsters, more action, more peril, more "big scenes" of violent action. It is a measure of Poul Anderson's stature as a writer of tales of wonders that in this story the human conflicts are what matter, stressed and triggered by the grim nature of the strange world where they are trying to live.

Strictly speaking, I should probably not bring the third book into this discussion at all, though it is the one I enjoyed most. Basically it is a fantasy—blood brother to the Harold Shea stories by L. Sprague de Camp and Fletcher Pratt that were gems of *Unknown Worlds*. However, there is just enough skeleton of "scientific" rationalization—Holger Carlson may have slipped into an alternate time-track, the world of mixed chivalry and magic of the French romances of Charlemagne and his knights—for Doubleday to label "Three Hearts and Three Lions" science fiction. It's $2.95 for 191 pages of grand action fantasy on a highly civilized level, and well worth it.

Holger Carlson is a Danish-born engineer, educated in America, who has gone back to lend a hand when his native land is overrun by the Nazis. In a skirmish on the beach he is shot in the head, and wakes up in a world of witches and dwarfs, fairy lords and elf folk, dragons and giants. A witch tries to trick him; a dwarf and a swan-maiden befriend him; a mysterious Saracen is on his trail; and numerous beautiful women are more than obliging. A student of Carolingian romance may find out who he is before Holger does, but it doesn't really matter. What does is the joyous blend of medieval romance and twentieth century pragmatism that helps Sir Holger handle a fire-

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breathing dragon and a nereid, warns him away from a giant's treasure.

I have no intention of getting into the middle of a fact-slinging struggle between Sprague de Camp and Poul Anderson, but it strikes me that Poul's world of medieval magic is a good bit more probable than the various realms in which Harold Shea and his friends disported themselves. The book is, of course, longer than any one episode in the Shea series; there's more room to fill in detail. But the basic theme of a man of our time and world face to face with magic has never been handled better, and if the humor is not quite so broad as in "The Incomplete Enchanter," it's plenty broad enough.

Here, in these three books, we have example after example of what a writer who isn't ashamed of wonders can do. Here are "old fashioned" themes and plots, made completely fresh by their handling and completely modern because the author is looking past the play of peril-and-action to the psychological actions and interactions of the characters. Needless to say, a writer who can't make characters come alive can't do this. Much as I love Andre Norton's strange worlds, most of her characters are far less real than Holger Carlson, or Erling Thorkild of "Gypsy" or Joshua Coffin of "Orbit Unlimited." Yet they, too, have preserved wonders for us. When we've stopped seeing the wonders of the world, something in us will be dead. Writers like Anderson and Norton are keeping wonder alive.

As this is written, in June, nominations for the best science fiction of 1960 have just closed; as you read it, the Hugo awards will have just been made at the Labor Day Convention in Seattle. It will probably be a good four months before I can announce the winners, and some or all of you may have had the Word before from other sources. However, for the record, here are the nominations. The Committee complains that the number of ballots was unreasonably small and scattered—hence the unequal number of candidates in the various categories.

For Best Novel of 1960, the choice is between the hardback book version of Walter M. Miller's "A Canticle for Leibowitz;" Harry Harrison's "Deathworld," which was serialized here in January-March, 1960 and brought out as a paperback by Bantam in September; Poul Anderson's "High Crusade," here in July-September and published in hard covers by Doubleday immediately thereafter; the short version of Algis Budrys' "Rogue Moon," from the December 1960 *Fantasy and Science Fiction;* and Theodore Sturgeon's original Pyramid paperback, "Venus Plus X."

For an era when science fiction—and ASF—are both supposed to be dead, this is one of the toughest competitions I can remember. You'll notice that two of the five novels appeared right here in what was still Astounding.

ASF has done well with the shorter fiction nominations, too. Taking

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them alphabetically again—as the Seacon Committee lists them on its ballot—we have Poul Anderson's "The Longest Voyage," here last December; Pauline Ashwell's "The Lost Kafoozalum," from the October issue; Theodore Sturgeon's original story, "Need," from his Avon paperback collection, "Beyond"—it's since been reprinted; and Philip Jose Farmer's "Open to Me My Sister," from the May 1960 *F&SF*. The latter story has an odd pedigree. As "The Strange Birth," it was in the last issue of *Satellite*—printed but never put on sale, when the magazine folded. I'm told exactly four copies are in existence, two of 'em in the Library of Congress where they were filed for copyright. *F&SF* then picked it up, as noted. Finally, with the name changed again to "My Sister's Brother," it was the last story in Farmer's paperback collection for Ballantine, "Strange Relations."

In the dramatic field, there is again tougher competition this year than there was last: two good movies, "The Time Machine" and "Village of the Damned," competing against last year's winner, "The Twilight Zone" of TV fame.

Analog is a contender for Best Magazine, as it has been since awards were made. Ed Emsh, Virgil Finlay, Frank Freas and Mel Hunter are contending for the art award.

THE BEST FROM FANTASY AND SCIENCE FICTION: TENTH SERIES edited by Robert P. Mills. Doubleday & Co., Garden City, N.Y. 1961. 262 pp. $3.95

Fantasy & Science Fiction has been winning Hugo's in recent years because, I am convinced, readers like its balance of science fiction and fantasy of practically every kind. This anthology of sixteen short stories and novelettes, plus one piece of serious but lightish verse, covers 1959, '60 and '61. It is not—as I have said over and over here—the "best" from these years; it is simply an editor's choice of a good, representative collection of stories he likes.

Ten of the sixteen stories are reasonably straight science fiction; two more are borderline. Of these, I can't choose a favorite—I have three, and first is a translation by Damon Knight of a story by the late French writer, Charles Henneberg. It is a very good translation of a very good story—a creepy, ironic thing about the tormented mutants of a post-holocaust city, and the siren songs that come from a chest from the far stars. It will haunt you, and so in another way will the portrait of a remarkable young delinquent in Daniel Keyes' "Crazy Maro." This story also shows that nothing in psi is so stale that a real talent can't freshen it. The author's teaching background shows through, as does Zenna Henderson's in her stories of the People.

Third of my Big Three is a grimly logical snapshot of a future society that mirrors certain themes in Frazer's "Golden Bough"—Will Worthington's "Who Dreams of Ivy." Al-

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most a companion piece in grimness is "It's a Great Big Wonderful Universe" by a new, young writer, Vance Aandahl. It shows a world where youth—the youth of the bored rioters—has taken over.

There are really only two stories in the lot that could be called "straight" science fiction, without the *F&SF* earmark. One is Richard McKenna's "Mine Own Ways," in which three trapped men learn a little of the inner meaning of savage rituals. Another is Poul Anderson's "Martyr," in which the secret of great psionic powers is gradually forced out of members of a superior race. John Collier's "Man Overboard" is slick magazine stuff—a portrait of a man dedicated to finding the sea serpent. He does—and loses his goal in the same moment.

The rest? Avram Davidson, unpredictable as ever, uses all of two pages for "Après Nous," a yarnlet with a twist at the end as two professors grope in the future. Katherine MacLean's "Interbalance" is another shivery portrait of children in a contorted future they have learned to accept as natural. Finally, Ward Moore's "The Fellow Who Married the Maxill Girl" is the strange story of the marriage between a farm girl and a stranger from the stars who has a gentle way with plants and animals.

Edging over the border, now, Holley Cantine's "Double, Double, Toil and Trouble" is a variant on the matter-duplicator theme that could have been SF if the narrator didn't say explicitly that he used magic to build himself up into a band. Robert Murray's "The Replacement" can also be taken as a story of the supernatural or of the idea that the world exists only in our minds.

There's no doubt, however, about the goings-on in Jane Rice's "The Rainbow Gold," a story which introduces the Pirtles, a Kentucky hill clan who must be kin to Henry Kuttner's Hogbens. When you can freeze a rainbow in its tracks and sit on the pot of gold until it goes away—the rainbow, that is—that's *fantasy,* not SF! So is Robert F. Young's "Nikita Eisenhower Jones," a space story in which the gods take a hand at the end, and so, clearly, is Niall Wilde's "A Divvil with the Women," which moralizes that not even an Irishman can be sure of winning a bet with Himself. Finally, from Alan Drury, author of the best-selling and best-playing "Advise and Consent," comes a chilly little tale about "Something" at large in a museum.

We're left with "Infinity," by Rosser Reeves, billed as a big corporation executive, which is fairly ordinary but well-made verse. Poul Anderson puts more poetry into two paragraphs of prose in "Gypsy" than Board Chairman Reeves does into three pages of rhyme.

WANDL THE INVADER, by Ray Cummings
I SPEAK FOR EARTH, by Keith Woodcott. Ace Books, New York. No. D-497. 135 + 120 pp. 35¢

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This Ace Double is practically the perfect example of a contrast between the old and new in science fiction. The Ray Cummings story was serialized here in Astounding in the magazine's early days—1932—while the Woodcott story is a fine example of vintage 1961.

"Wandl" is a sequel to "Brigands of the Moon," with Gregg Haljan and girl friends again saving mankind—this time from a roving planet, peopled by insectlike workers and gigantic and malevolent brains, which invades the solar system and proposes to haul Earth, Mars and Venus off to a far star. The pink critter on the cover, incidentally, does not resemble anything in the story, and neither of the two girls is a blonde.

The story itself is typical Cummings space opera. His yarns, and to a lesser extent Merritt's, have the effect of a soap opera or a standard melodrama played out in a superb stage setting, and in this one the sets are less interesting. His conversational style—which infuriated the purists but probably read very well aloud—is less marked, also; the Clayton editors may have been stricter than Munsey's. I like Cummings, and think the paperback publishers have neglected a mine of old stuff better than what they have been dredging up, but this is not in his best vein.

"I Speak for Earth" is something very different. It really asks the question: "What is Man?" The theme is an old one; the handling is what is superior.

Here Earth, about to go into space with a starship, is visited by the emissary of a Federation of Worlds who tells them Man isn't wanted in the galaxy. However, if one human being can get along in the Federation capital for a month, the ban will be lifted. Mankind's answer is to combine six personalities in one body—and then the plot begins to squirm.

The characterization of the six delegates is excellent, and the problems of inhabiting one body well worked out. What they find on the Federation world is confusing and unexpected, and the final solution logical but not telegraphed—at least not to me. And at the end we have some ideas about what makes mankind Man.

Cummings' people were stock actors, going through a stock action plot amid novel surroundings. Keith Woodcott is writing about human problems, really more important than the save-the-world framework in which they are presented. This is the difference between 1931 and 1961.

MAN AND THE MOON, edited by Robert S. Richardson. World Publishing Co., Cleveland & New York. 1961. 171 pp. $6.50

This handsome Moon symposium might be subtitled "the return of Chesley Bonestell," who has done a magnificent jacket illustration and several interior plates in both color and black-and-white. It also nudges me into airing a pet gripe. Consid-

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ering the short life of book jackets, why will a publisher spend the money on big, full-color plates for a jacket and not use them again inside the book—say on the end papers?

What our old friend Dr. Richardson has done here is to assemble a series of articles—plus an introduction of his own on imaginary voyages there—that outline our present ideas of what Earth's satellite is like, how we can get there, and what we can do there. The dominant theory of the lunar craters—that they were produced by the impact of asteroid-sized and smaller meteors—is thoroughly presented, as are some of the arguments for not ruling out volcanic forces. Among these is the observation by a Russian astronomer of what seems to have been a volcano in action in the crater Alphonsus.

In the descriptive section there is also the Britisher, T. Gold's suggestion that the Moon may be covered with hundreds of feet of dust rather than with lava flows, and a better discussion of what was shown by the Russian photos of the back of the Moon, than you will find in the Pergamon Press book on that subject.

The British star in the book: most of the last section is made up of papers, reprinted from the *Journal of the British Interplanetary Society*, on the problems of mining, building, farming, generating power, et cetera, for a lunar base.

Now for the gripes. I've complained about throwing Chesley Bonestell's biggest and best painting—a scene in the lunar Jura Mountains—on the jacket, where it will soon be torn off and lost. Instead, as fore and after end papers, we have excellent photographs of the Moon with formations labeled. However, with the hidden hemisphere as important and new as it is, the publisher has seen fit to reduce the Russian map of that hemisphere, made after study of all their photographs, to a small cut with a diameter of less than three inches, while good but rather well-known photographs of formations get the usual full page.

Also striking for its absence—and for this we must blame Dr. Richardson and not his publisher—is anything on the lively controversy over the origin of the Moon. Is it a captured companion-planet? Is it a result of the accretion that left such visible scars on its face? A book as good as this should have been enough better to include a little of this.

FACIAL JUSTICE, by L. P. Hartley. Doubleday & Co., Garden City, N.Y. 1961. 263 pp. $3.50

This English offering by a veteran writer is a thorough disappointment. L. P. Hartley is a contemporary of Blackwood, Machen, Benson and other masters of the weird and supernatural fantasy who has done some excellent and undated stories in that field. Now, however, he has written a satire of the future that limps and creaks. It's simply as old-fashioned as the fact that his people are fed bromides instead of tranquilizers.

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During World War III people have gone underground; long afterward, their society frozen into rigid patterns, a few of them return to a barren surface and settle down to unimpassioned conformity based on utter Equality and the eradication of any grounds for Envy. Everything must be held to a dead level—or below. Among other things, a woman who is too beautiful must submit to "facial justice"—have her face changed to a mask of pseudo-flesh exactly like that of every other woman on the Beta level. Ugly—Gamma—women can be upgraded in the same way.

The heroine, Jael 97, is a rebellious soul, whose rebellion is smashed down ruthlessly by the invisible Darling Dictator. Given a Beta face in punishment, she launches a successfull revolution that comes to an ironic end.

Details are nice—the rituals of conformity, for example—but the book as a whole falls flat. The author is uninterested in developing scientific or technological details, and his writing shows it. Doubtless this will be acclaimed by critics and librarians.

THE MIND THING, by Fredric Brown. Bantam Books, N.Y. No. A-2187. 349 pp. 35¢

This is highly reminiscent of Hal Clement's "Needle"—in theme, at least. A fugitive from another world finds himself on Earth, and takes possession of mind after mind in search of one which will enable him to build an apparatus to send him home.

There the resemblance stops. Fredric Brown's accomplished hand with detection comes into play, and we run with the hare and hunt with the hounds, as Dr. Ralph Staunton, MIT physicist, tries to correlate the sequence of seemingly unrelated animal and human suicides, while the Mind Thing comes closer and closer to him. The Thing's hunt is inhuman and ruthless enough to be menacing, but we tend to become his partisans until the danger to Staunton grows too great. I'm not sure that this division doesn't detract from the force of the story: you've no sooner identified with the monster than you're looking over Doc's shoulder at the gray kitten that may be from another world.

This is close enough to what Hollywood can do so that a smart director just might play it straight—without hiring Karloff for the Mind Thing. There'd be a really grand finale with charging bulls, plummeting vultures, and other hazards laying siege to the isolated farmhouse, while Doc fights against sleep.

THE RUNAWAY WORLD, by Stanton A. Coblentz. Avalon Books, New York. 1961. 224 pp. $2.95

The veteran SF satirist of the early days of *Amazing Stories* seems to be writing again. At least, I don't recog-

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nize this as a resurrected oldie in anything but mood and approach.

Coblentz's method has always been the rather heavy-handed one of Gulliver and his contemporaries—satirizing present tendencies by exaggerating them and attributing them to future societies or alien races. This one goes far in our future when a wandering planet, Orcus, has nearly wrecked the Earth. Half the human race—Well Rounded Gentlemen known as Antelopes—migrate to Orcus; the technologically adept but humdrum, uncultured Ants stay behind. Then, after a while, the Ants begin to raid Orcus for women. In one such raid, Our Hero loses his girl and sets out in pursuit.

This young man, Mog by name, has also to contend with a Nogood who stows away on his ship and sells out to the Ants. However, Mog has no real trouble hiding out in an Ant city, until he tries to rescue Lellum. Tribulation can't keep a Good Man down, and before you know it Mog is running the money-mad Ant society.

Ho hum.

SPACEMEN, GO HOME, by Milton Lesser. Holt, Rinehart & Winston, New York. 1961. 221 pp. $2.95

Three major publishers have merged since we last met the Winston juveniles, but the brand is about the same as ever: good, competent, teen-age science fiction, but not in the same league with those Robert Heinlein and Andre Norton have been writing.

This is straightforward adventure, directly told, well handled, if not entirely plausible. Mankind has been "grounded" by the Star Brain, a gigantic computer that keeps peace in the galaxy by settling disputes among its civilized races. When a decision went against Earth, spaceman Reed Ballinger tried to bomb the Brain and got his entire planet banned from space as a result. But he promptly begins to assemble an outlaw fleet to do the job over again. Among his recruits is our hero, Space Cadet Andy Marlow, and some of his buddies.

Finally, fed up with Ballinger's secret camp, Andy escapes and discovers a rival project in Norway, where his brother and others are assembling a visual history of Mankind, with which they hope to convince the Star Brain that the edict should be lifted. They need Ballinger to blast a way into space for them . . . then the Cadets are supposed to take over the war fleet, while Project Nobel begins the talking.

All this may not sound too logical, but the action moves swiftly enough and the key argument—that contact between races is essential for the good of the galaxy—is well worth making.

THE END

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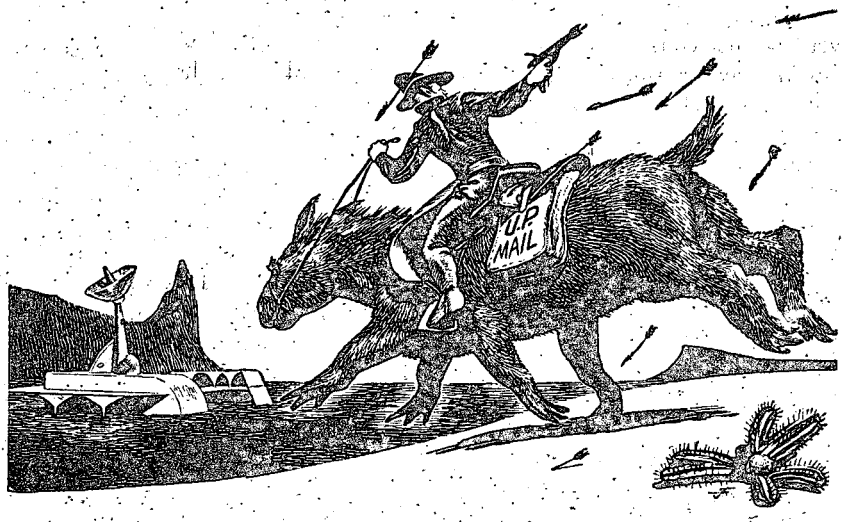
BRASS TACKS



Dear Mr. Campbell:

Your engineering plan for Utopia was well developed, but I judge that you had a "sign" wrong in your major specification. It should be, I believe, the *bottom* twenty per cent who have the vote. If the top twenty per cent had the vote, they would set about to further shrink the size of their group and soon things like a private 707 for every voter would become law. If nothing else, their wealth insulates them from what's wrong to the point where they can't see beyond their own balance sheets.

The bottom twenty per cent is the group which knows most acutely what is wrong with society and which has the most legitimate reason for wanting to change it. As a group of poor changed conditions to favor themselves they would grow wealthy, lose interest in social problems and not mind letting their franchise slip away. The rich could always block a voter by giving him enough wealth to disenfranchise him or becoming voters themselves. The few who have a genuine love of political power for its own sake could remain poor and become office holders—a real proof of sincerity and a fitting reward. The rich would find it imperative to give the poor and potentially poor the best possible free education and special interest groups—like physicians or teamsters, for example—would see to it that the poor think very well of them indeed. Exploitation, never a good thing, would be directed against the rich who wouldn't mind so much.

The poor governed nation would

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compete well against the conventional rich governed ones. Of course, accepting the credentials of the ambassador of the poor governed nation might be awkward because he would be in rags and carrying a begging bowl. He could be relied upon, however, to exact the last cent in any dealings and since the slightest personal gain would remove him from office he would be quite beyond bribery or "entertainment."

Waste and superfluous functions would vanish from government because the heads, all of whom would be hungry and destitute, would be so sensitive about those things. The higher the office the poorer the man, naturally. Army generals, whose uniform would be a set of discarded fatigues, would hawk-eye every requisition by their own standards. The president's office would have to be something like a condemned garage. I calculate the savings on office paneling, morocco attaché cases and Homburgs would buy a squadron of ICBMs. Of course no one could calculate the worth of a presidential TV appeal for greater sacrifices; he would be kneeling, near naked behind a packing case desk, his cheeks would be sunken and he might have a vitamin deficiency twitch.

This is only a Utopian dream, of course, but it shows what might be possible. Perhaps we *can* repeal Parkinson's Laws.—George D. Talbot, 101 N. Mills Street, Madison 5, Wis.

Well—that's the way we're heading now; isn't it?

Dear Mr. Campbell:

The way I heard it, Lincoln failed in business several times, failed as a lawyer, and then did some failing in politics before he became a success as President of the United States.

The best parents are those who do themselves out of a job by making themselves unnecessary.

Likewise, the best psychiatrists are those who set their patients on the road to health, thereby making themselves unnecessary.

The best doctors are those who help people to take care of themselves in sickness as far as possible, and to live in a way that they are less likely to get sick in the first place, thereby reducing the need for doctors.

The best policemen are those who help people not to become criminals, or to give it up if they have begun, thereby tending to do themselves out of a job.

The best teachers are those who help people to learn for themselves, making fewer teachers necessary.

The best lawyers do themselves out of a job quite often, by showing people other ways to proceed to a solution of their problems.

So, why not conscript for government office people who do not want to govern, and require them to stay in office until they have found some way to make less government necessary?—Mrs. Barry Stevens, 1627-G Grant, Berkeley 3, California.

Remember Algis Budrys' "Death March" in the October 1956 ASF?

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Dear John:

A treasured souvenir of my boyhood is a fantasy yarn entitled "AD 2,000." It is has followed me through many years—it is the story of a young Army lieutenant who, disgusted with the stagnant prospects of an Army career in 1887, finds a means of placing himself in suspended animation and wakes up in the year 2,000 to fame, fortune and happiness.

The title page is missing, so I have neither the name of the author nor of the publisher. I believe it was issued about 1890. Otherwise the book is complete except at what appears to be almost the end—page 412 is the final one I have. There should be one or two more pages.

To further identify it, it is a yarn somewhat reminiscent of Edward Bellamy's famous "Looking Backward," although less Utopian and more practical.

If any reader of "Brass Tacks" has it, I'd appreciate its loan long enough to reproduce the parts missing from my edition. I would of course pay postage and take the best care of it.

If you'll publish this in "Brass Tacks," I'll be most grateful.

On a different subject, John, congratulations on the nice "spread" you had in the *Saturday Evening Post* last autumn.—Richard R. Murray, Lt. Col. USA-Ret, 4015 South 7th Street, Arlington 4, Va.

Anyone know that yarn? It's one I don't recognize! And the only "AD 2000" I ever saw was a book printed in Chinese ideographs!

Dear Sir:

Regarding your editorial in the May 1961 Analog, there are two points on which I disagree.

First, I do not believe that cultural change is evolutionary. I believe that it is cyclic. That Citizenship tends to degenerate into Conformity which degenerates further into the sort of Ritual-Taboo which you call Tribesmanship. The second point is that we have *already* gone through such a cycle since the days of the cowardly-Roman - legionnaires - who-let-other-people-tell-them-what-to-do.

It began with the rise of the Church to a position of authority—the worst thing that ever happened to it. The Church then became a Source of Answers. This was a time during the Early, Dark, and Middle Ages. Then was the time when the priests, bishops, cardinals, and popes were believed to be the personal representatives of God, and therefore infallible.

Then the Protestant Reformation came, which stated that any man who read the Bible and believed it was capable of understanding it. This was the equivalent of your description of Barbarianism. Now we have the equivalent of citizenship again, wherein each person is allowed to decide some things for himself, but is forced to let other people tell him what to do on other subjects.

However, we are now entering into an age of conformity again, in which we will probably degenerate into a strict ritual-taboo type of snivelization. Whereupon the whole process will undoubtedly repeat it-

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self.—Marvin J. Tanner, RR 2, Box 87, Vilonia, Arkansas.

Cyclic, yes; circular, no! It's a spiral —and it's that spiraling that yields evolution.

Dear Mr. Campbell:

I am enclosing the questionnaire that you sent around via ASF & F some time ago. Since magazine shipments come by sea freight there is usually quite a delay in reaching this rather remote locality and the delay is increased with misrouting. I remember one shipment was rather late because it had been missent to Bermuda.

Newsstand accessibility is rather limited in Bangkok, there being only two newsstands where one can have a reasonable probability of finding the magazine. I had a subscription but allowed it to lapse as only about half of the issues ever reached me—lost enroute. You may be interested to know that it is possible to obtain a subscription locally; the big news importing company here will accept a subscription and deliver the issue to the customer's door every month. Much more reliable than the mail.

I know of two other readers of ASF & F here, both are M.D.s and both are malaria specialists. There are others that I do not know but can deduce as the newsstand supply disappears very rapidly.

I will not comment on the last issue I have seen as it is about two months behind the States. I enjoy the Magazine as is evidenced by the fact that I have been reading it since 1933 and have had no reason to stop reading it.—Lowell A. Woodbury, Women's Hospital, Bangkok, Thailand.

Think you have troubles getting Analog? In the United States . . . ?

Dear Mr. Campbell:

Mr. Willard has demonstrated once again that people have a strong tendency to think of problems in the wrong terms. We will take the sounding rocket pressure transducer as an example.

REQUIRED: a low priced pressure transducer with a millisecond response time

ANALYSIS:

There are certain terms which raise the cost of a device by their presence in a set of specifications. Some of these are "transducer," "millisecond," and "response." Therefore, we rewrite the specifications. Required: a device that converts air pressure variations—below 500cps—to an electrical effect.

The most common form of air pressure variation is sound—hm-m-m—Required: a cheap, insensitive microphone? Certainly. However, the microphone is to be installed in a rocket and should, thus, ignore vibration. This suggests a symmetric construction.

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CONSTRUCTION:

Two carbon cylinders ¼ inch diameter by ⅛ inch high are mounted in a plastic pressure chamber ½ inch diameter by ¼ inch high. This chamber should have rigid walls and flexible ends. For ease in fabrication, and for air inlets, one or more large holes are left in the wall. Leads connected to the carbons are also run through these holes. Since a reference pressure is required on the outside of the chamber ends, the wall is extended ⅛ inch beyond the chamber, and the resulting cups are capped. Cost of the device, produced in quantity, should be between one and two dollars.—J. W. Harter III.

Could be? !

Dear JWC:

Re your March editorial: There *never* will be *one* satisfactory type of government or governors as long as the attempt is made to make one government serve the hetrogeneous mess of diverse human types. The first order of business of any responsible government which has the power to act rationally will be to sort our population mess into about forty or fifty fairly homogeneous populations and keep them separated.

The central or overall government must exercise the power necessary to keep these fifty populations segregated and prevent all physical contact or interference between them. This is the solution offered in Reynolds' "Ultima Thule." Only when segregation and classification has been accomplished—only then can each different population be given the type of government it needs, the type of government which will nurture the best potentialities and make the best uses of individual citizens.

Each generation of children will have to be again classified and shuffled into the population to which they belong. The loss of their parents will be more than compensated for by the joy and release of living among their own kind of people—which their parents were not! Ninety per cent of human misery and lost efficiency today is the result of culture-conflicts between people born in the same area but as different from each other as they would have been if they had evolved on different Earth-type planets. And from divorce statistics, I estimate that forty-five per cent of all adults have the misfortune to marry aliens! Hurry up with that practical space drive, huh?—George D. Krouse, Room 222 NZR Railway Station, Wellington, New Zealand.

Every major step of human progress seems to have followed the vigorous—even violent!—mixing of different human breeds. The United States for example—and now Russia is a melting pot!

THE END

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Continued from page 5

Trial *vs.* that of Lynch Law that the accused turns out guilty.

For the sake of the argument, let us assume that it has been proven, one hundred per cent proven—which it hasn't, but assume it has—that Dean is wrong.

The Air Force—and NASA and the Army and the Navy and all the other government agencies Dean tried to interest—are wrong—guilty of Scientific Lynch Law—*whether Dean is wrong or not.*

If a mob lynches a man as a rape-murderer, and subsequent investigation proves conclusively, beyond peradventure of doubt, that the lynched victim was, in fact, guilty of the rape-murder—does this make the mob action perfectly proper and justifiable?

Hell, no! It's still lynching!

Sure, the victim in that case was guilty . . . *but so was the mob.*

The government science agents are guilty of scientific Lynch Law, *whether Dean is guilty of being wrong or not.*

The one point that I could not establish in June, 1960, has been solidly established in the intervening year.

That point was: "Is there any reason whatever to suspect that Dean *might* be right?"

If I had been able to *prove* there was reason for believing that some remote possibility existed . . . then I would, in June, 1960, have had a fully proven case of Scientific Lynch Law, chargeable to the Government Scientist Mob.

That point has been proven in the subsequent year. Paper analysis by physicists showed conclusively that it was impossible . . . ; but a computer simulation said it worked.

Most of the physicists who actually allowed themselves to see a demonstration of the device came away badly shaken, and thoroughly convinced—*not that it worked, but that it had to be investigated thoroughly.*

Whether the Dean device works or not—the government science agencies have been provably guilty of Scientific Lynch Law. Remember, and keep firmly in mind, the point that Lynch Law has nothing whatever to do with the guilt or innocence of the accused—but solely deals with the attitudes and methods of the lynchers. A man who's been caught red-handed in the act of murder, is still a victim of lynching if he's strung up without trial.

If the governmental science agencies prove conclusively that Dean is wrong . . . they remain guilty of Scientific Lynch Law, because they did not investigate *before* the patent was issued, and the possible discovery made available to our enemies.

The prime point of the June, 1960 article is, I hold, fully proven. The inventor of break-through concepts is faced with a Lynch Law attitude when he seeks to get ideas through to our government. They will not give him a Fair Trial, when his device *is* a break-through device—because, by definition, a break-through device demonstrates a hitherto unguessed

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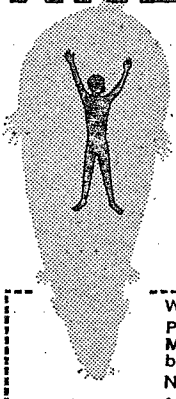
By HUGH SYKES DAVIES



This is the story of a brilliant young scientist who had been studying rat behavior in the sewers of London. Radioactivity, he had come to believe, was urging the rats at a fantastic rate of evolution to a society already comparable to that of the caveman. Then one day he failed to return, not by accident but by design. And so his friends set out to locate him and discover why he found it more important to explain human behavior to the rats than rat behavior to human beings.

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potentiality in the Universe. And is, therefore by definition, contrary to "known and established laws of Nature."

Now someone with an idea like Dr. Robert Goddard, trying to get the government interested in rocket power, has a really rough time. Par for that course is beautifully illustrated by a lovely little case down in the Smithsonian Museum in Washington. There are models of the beautiful gold medal awarded to Dr. Goddard in 1960 . . . posthumously, of course. Science is always ready and willing to honor its pioneers . . . particularly after they're safely dead. And particularly after the Germans first applied Goddard's developments, and the Russians have been outdoing us so brilliantly. It's nice, then, to show an American started it all.

Goddard, however, was merely applying then-known and accepted laws, to accomplish a desired end. What he had was true science-fiction of what we might call Type I; the theoretically-explainable-not-yet-practical device.

When Roentgen first demonstrated X rays, however, he had a science-fiction device of an entirely different order; it was *not* theoretically explainable at the time. It was a Type II science-fiction device—an already-practical-not-yet-explainable device.

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Coming at the time he did, Roentgen had relatively little difficulty getting attention. Within weeks—long before anyone could explain his mystery, or X, rays—the doctors at a Vienna hospital were using X rays in surgical work.

Par for the course on a theoretically-explainable-not-yet-practical device seems to be a posthumous medal.

There is no par for the practical-but-not-yet-explainable device, because of another gimmick. Quite regularly, such instances lead to the thing finally being credited to the man who finally explains the thing, instead of to the man who discovered the thing.

If a Dr. Hammurabi the Great Physicist should work out a theoretical explanation for the Dean drive, for example, there'd be an extremely strong chance that it would, in years to come, be known as the Hammurabi drive. Much more comfortable to theoreticians to attribute the development to a theoretician, anyway.

This makes it difficult to establish a par for the practical-no-theory inventor.

If it isn't the theoretical explainer that gets the credit, it's apt to be the high-pressure salesman-promoter who puts it over—as everyone knows that Robert Fulton was the man who invented Fitch's steamboat.

Finally, a comment on that Air Force testing report on the Dean drive.

The test was run by a testing laboratory under an Air Force contract. Mr. Dean was asked to supply a model for testing, which he did . . . but was not invited to explain how to test it.

I am strongly reminded of the somewhat plaintive tags and labels manufacturers stick on their electronic equipments these days. "If At First You Don't Succeed . . . TRY IT OUR WAY!" On an FM unit, I saw a bright red tag saying, "PLEASE . . . try it OUR way FIRST"

It's quite commonly true that you're more apt to get results if you try it the manufacturer's way . . . particularly if you try it his way *first,* before you louse it up so it won't work *any* way.

They never did try using Dean's device the way the manufacturer recommended, which may have something to do with the failure.

Since Dean has a break-through device—if he has anything at all—it follows that it must operate on a principle not heretofore understood.

This necessarily implies that a highly trained, competent and intelligent physicist does NOT understand how the Dean machine works, and should be willing to allow himself to be shown *first,* before trying it his way.

There is also a certain degree of tension, under such circumstances, when it is fairly plain that a positive report would be most embarrassing to the contractor's employers, the Air Force. Such tensions many times lead to nervous errors in setting up equipment.

The Editor.

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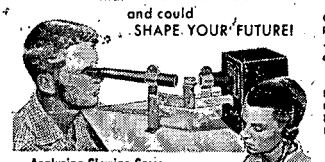

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